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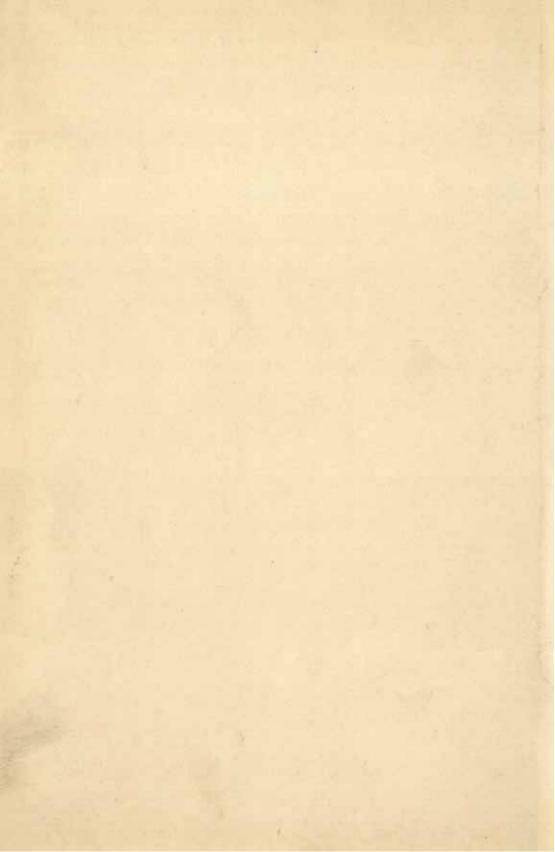
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THIS BEAUTIFUL INDIA
HARYANA

TARRANGE BOOK

# This Beautiful India

### HARYANA

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Print Addition

SUKHDEV SINGH CHIB Panjab University, Chandigarh

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First Edition



Published by N. Gopinath for Light & Life Publishers, 2428, Tilak Street, Paharganj, New Delhi-110055 and Printed at Ashokas Press, New Delhi - 110005. To my beloved wife Mrs. Shashi Kanta Chib, M.A. a bold and fearless daughter of Haryanvi soil, who about a decade and half ago revolted against the orthodox Haryanvi society and went for an interstate, inter-caste and dowryless austere marriage

I started my teaching career in Haryana, then the part of composite Punjab. In those days I had the privilege of visiting places like Ambala, Karnal, Hissar, Rewari, Sohna, Narnaul etc. For me who had come from the snows of Dhauladhar to the sands of Narnaul it was a new but disgusting experience. These towns and their surrounding areas wore an almost a deserted and lifeless look. Filth, dirt, want, poverty, hunger barren landscape prevailed everywhere. I felt that in want of natural resources like perennial rivers, forests, fertile soils this tract shall continue to be at the mercy of nature and no amount of planning could help emancipation of illiterate and ignorant masses. After one decade I again visited Karnal, Ambala, Rohtak and Hissar. I was simply amazed at the development the state had witnessed. The state was hardly half a decade old but the all round development it had achieved was never achieved by any of the states during such a short span of time. Infact the people and leadership in Haryana worked wonders. The beautification along the Grand Trunk Road, the face lift of religious places, the lift irrigation, rural electrification, dairy development, industrial break through, green revolution, expansion of education etc., etc., have reached such pinnacles of glory that they deserve emulation by all those who desire a better future.

One of the earliest homes of the Aryans, Haryana bears the imprints of Aryan civilization. Our saints sages, and seers lived and meditated in the forests that once prevailed in Haryana. The Song Celestial Shrimad Bhagvad Gita was recited at Kurukshetra where the epic was between Kaurvas and Pandava's was fought. The great epic Mahabharata was composed on this land besides the later part of Vedic Literature. Enroute to Delhi, the seat of political power through ages, Haryana was trodded by many a foreign invader. Hallowed by the sacred relicts Haryana presents a fascinating picture. Earlier there was almost a dearth of literature on this state, but slowly and gradually books have started appearing on Haryana. I am indebted to Shri Muni Lal and Shri D.C. Verma two authors on Haryana for providing me a sound base for this title through their nicely written volumes.

My thanks are due for the Directorate of Public Relations Haryana. The Directorate generously helped me with the supply of literature and photographs on the State. My wife Mrs. Shashi Chib and children Pankaj and Ritu have put up a lot of patience during the preparation of this book. I am thankful to all of them for not bothering me for their needs.

I am aware of my shortcomings and many might have creeped into the book. To remove those I request the learned readers to

kindly intimate me about those faults of mine.

May 1977 Author

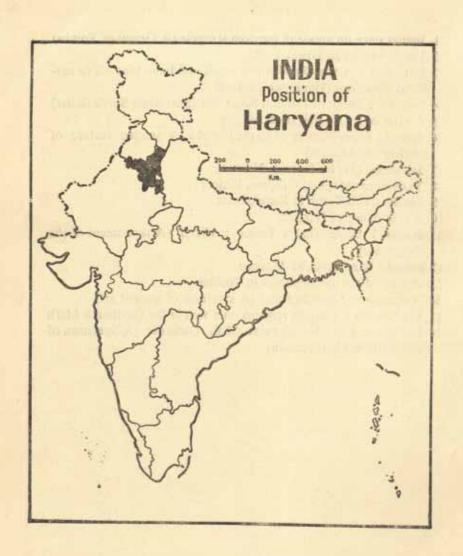
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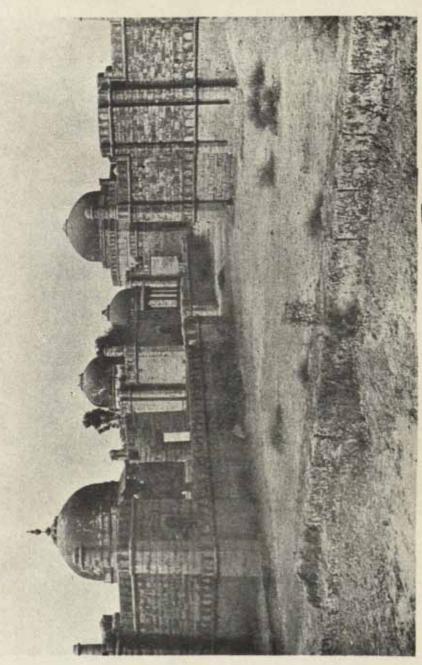
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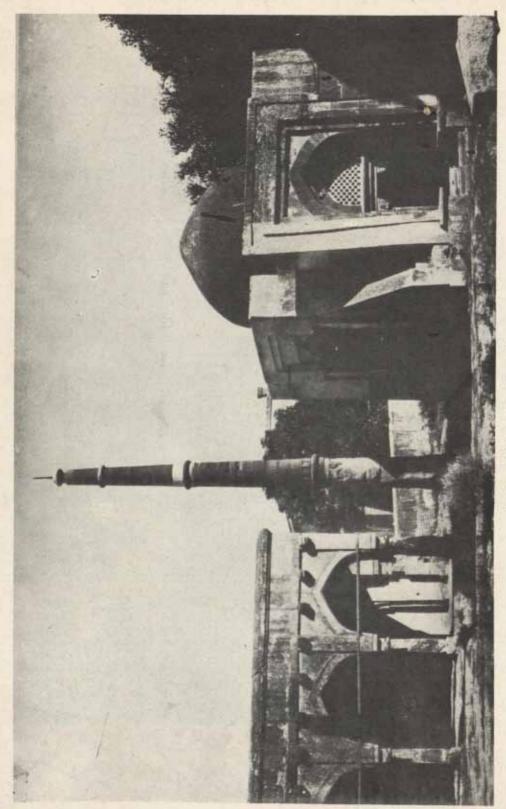
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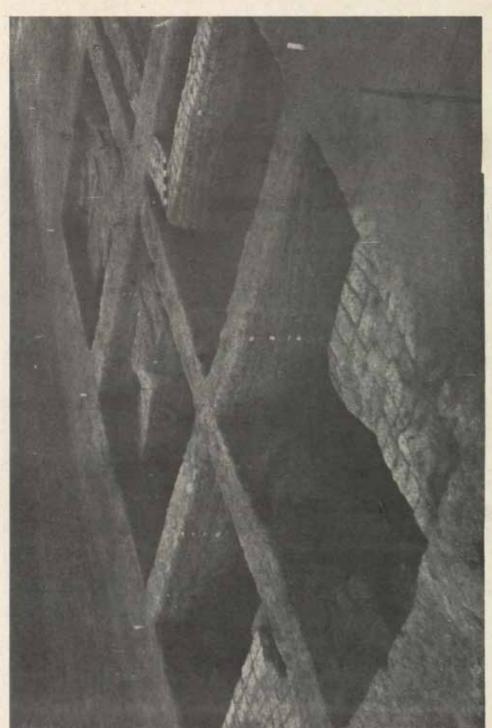




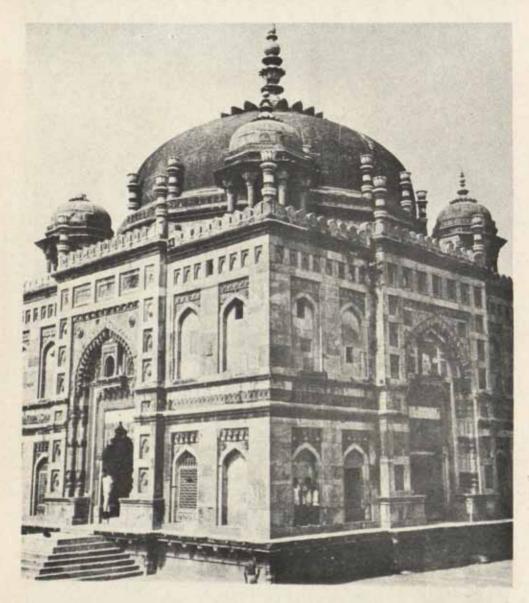
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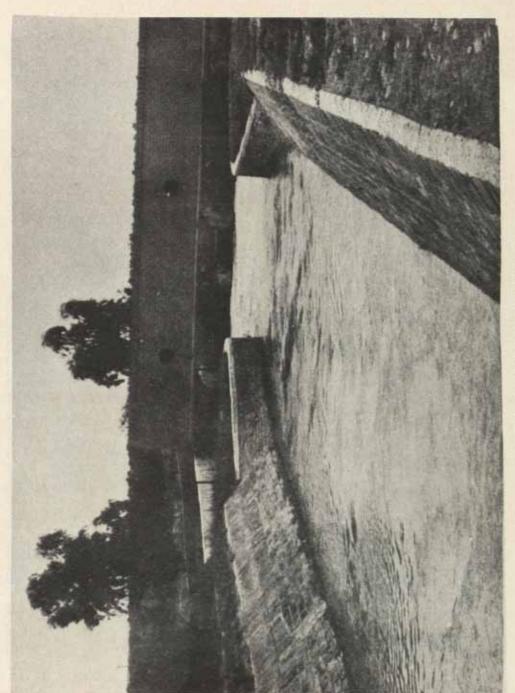
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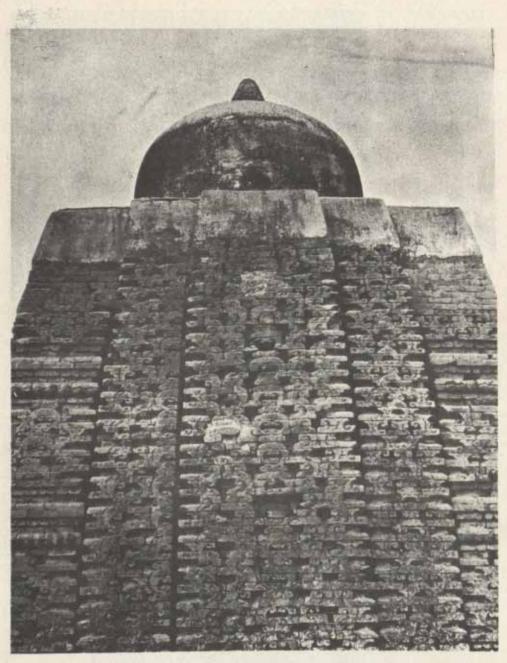
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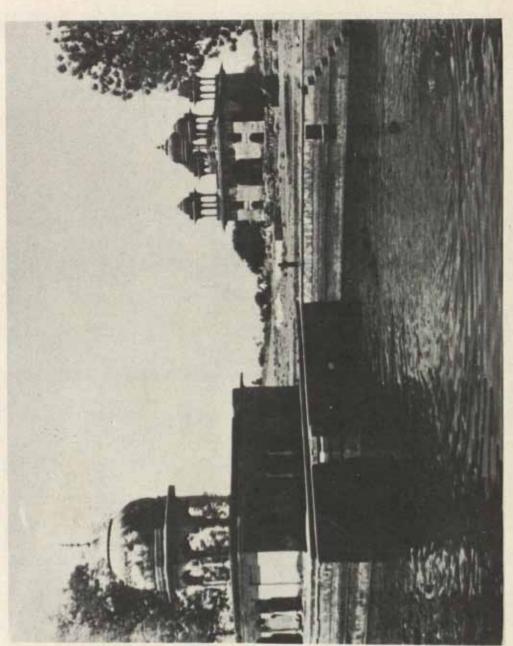
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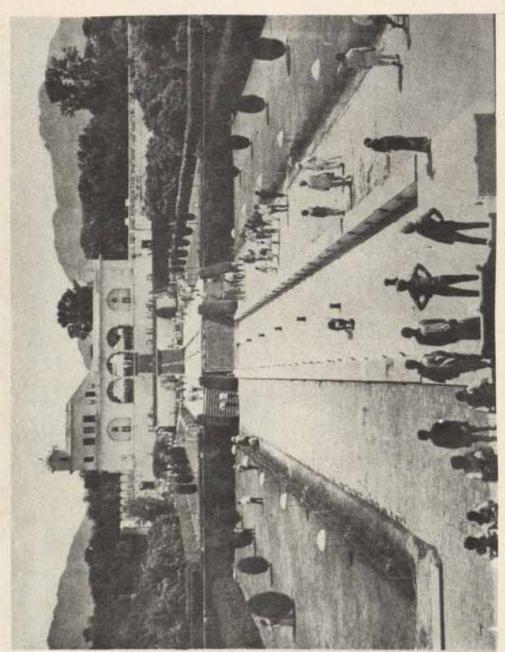
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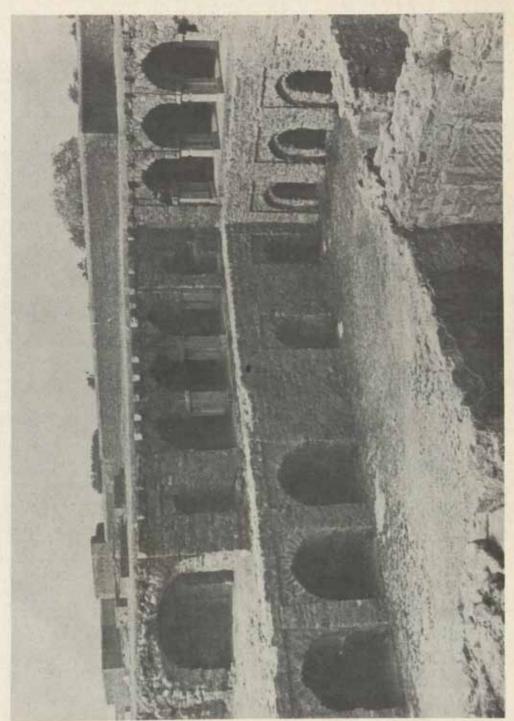


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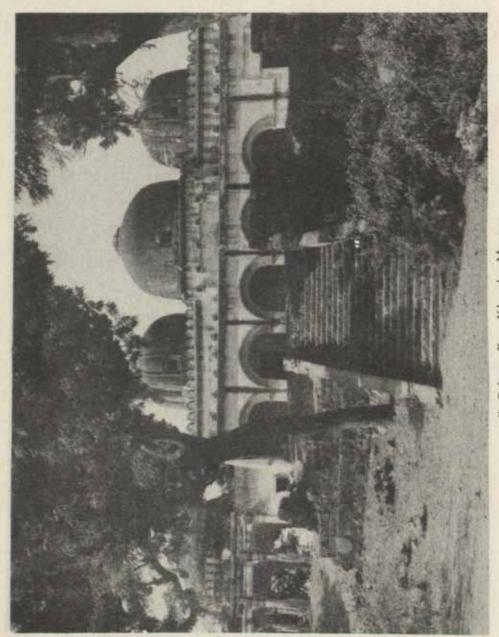
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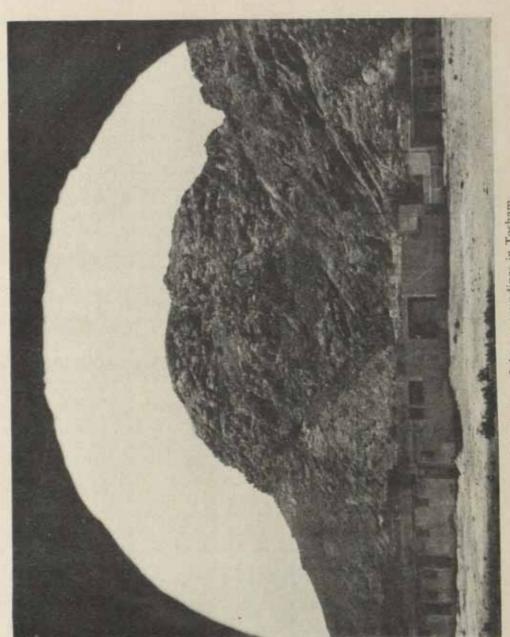
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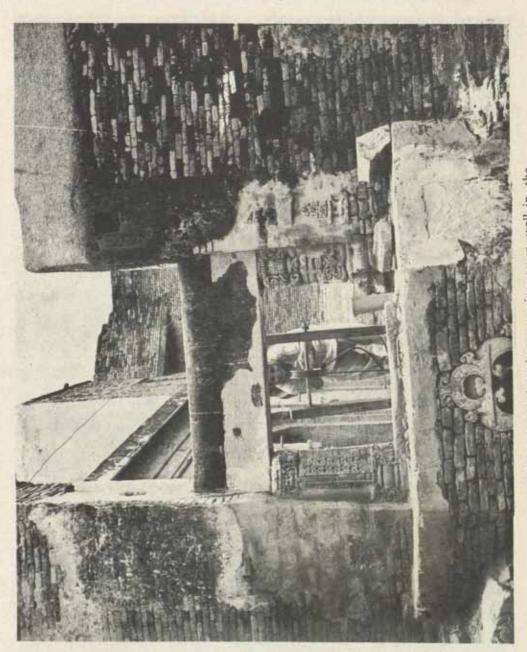
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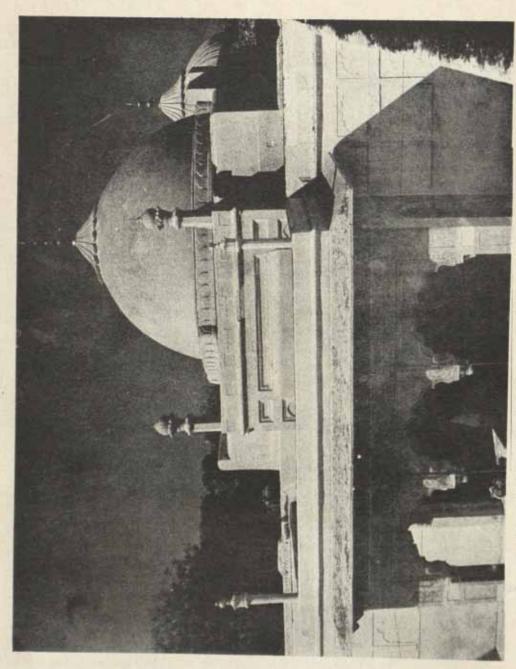
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## Through the Window of History



With a cradle of rich cultural heritage and hallowed by the memories of great saints, sages and seers, Haryana one of the youngest and smallest states of the Indian Union has a chequered history right from antiquity. "It was on this sacred soil that Lord Krishna gave his immortal message of selfless action to the wavering and infatuated Arjuna, who quailed and quivered before the clear call of duty to take up arms in defence of his honour and dignity and give a fight to his evil-minded kinsmen."1 Thus was born Song Celestial Holy Gita, treasure of Hindu philosophy on the historic battlefield of Kurukshetra which besides leaving an undeliable impress on the mind of surging humanity transcending political barriers and climes has also won innumerable adherants and admirers all over the world. A Gateway to Delhi, the seat of political power and upheavals from ancient times Haryana has passed through many vissictitudes. "The pages of Rig veda are replete with touching references to the beauty of this region and wanderings there of wisemen intent on saving mankind through spritual uplift....The

people of Haryana may not now be conscious of their great heritage, but in their blood stream they carry unknowingly the impulses which over the years led to India being equated with the finest in the realm of spirit."2

### Haryana The Name

The origin of word Haryana has been traced in many sources as also explained in many ways. The word 'Haryana' finds the earliest mention in Rig Veda. The entire latter half of the Vedas was composed on the bank of River Saraswati in Harvana. In the museum of National Archives at Delhi, one finds an inscription belonging to Muhammad Bin Tughlaq's times on which the word 'Haryana' is inscribed. A common man thinks of greenland (Hara) only while delving into the meaning of this connotation. This name in that way points out to that ancient time when this land was quite green and fertile. The ancient and archeological finds of this region reveal that in ancient times this tract watered by Saraswati was a leading centre of Hindu culture and civilization. The mention of 'Sugarcane forests' during Timur Lane's invasion in and around Tohana testifies that at that time Ghaggar valley was quite fertile although by the same time Hissar and its surroundings had become parched with sand. It is a recorded fact that present Haryana tract, a part of the vast Indo-Gangetic plain was once covered with dense green forests (Haryalaban) because of tropical humid climate prevailing then. The present name that way might have originated from Haryalaban. In Hindi language 'Green Forest' is also written as 'Hariaranya and this word might have corrupted to 'Haryana'. Similarly a wild plant Hari-ban once growing in abundance in this region could have also helped in the origin of present nomenclature. Those who delve deep into the religious and spiritual literature created on this sacred soil find an answer to this puzzle in mythological literature. According to them this tract worked as chariot (Ayana) of Lord Indra (Hari). Similarly the coming (ana) of Lord Krishna (Hari) is associated with the name of this region. "The more militant section of the community liked to believe that Haryana was the vehicle (Ayana) on which rode triumphantly the mightiest of the mighty Lord Mahavira (Har)."3 According to Late Rahul Sankrityayana, a reputed scholar of ancient Indian history, and culture the present name is the corrupted form of Hari-

<sup>2</sup> Lal, Muni, Haryana, Delhi, 1974 p. 3-4.

<sup>3</sup> Ibid., p. 5.

dhankva the name by which the area lying between the Siwaliks in the north and the Aravalis in the south, has been called in ancient literature, G. C. Awasthi in his book Ved Dharatal traces the origin of word Haryana in Rig Veda. He is of the opinion that King Vasuraja who ruled over this region in pre-historic period used Haryana as a qualifying adjective and thus the area came to be called by this name. The present Ahir caste gets its name in the corrupted form from Abhir the name by which their ancestors living in this area were known in ancient times. Hence Dr. Budh Parkash is of the opinion that present name 'Haryana' has emerged during the course of time from Abhirayana of post-Mahabharata period. Maharaj Krishan in his Tarikh-i-Zila Rohtak remarks that the present name of Harvana might have been derived from the Hindi word haran (to steal) after the misdeeds of dacoits and robbers once abounding in this region during pre-Mughal period,

Harivala finds mention as a land of five lakh villages in the Skandpurana also. Hariyala might have corrupted into Haryana, On the Bohr (Palam Baoli) inscription of VS(Vikrami Samvat) 1337 the area has been mentioned as Hariyanaka whereas on the Lander inscription (Jodhpur) of VS 1373 it is described as 'Haritanaka'. The Sarahan inscription of VS 1384 and the Badayun inscription of early thirteenth century (probably of Lakhanpal regime) Haryana finds mention. Dr. Hari Ram Gupta, an authority on the history of Puniab (including present Harvana) opines that Harvana is the corrupted form of Aryana the early abode of Aryans. If after the Lodhis, Raiputs and Bhattis their ancient homes can be called Ludhiana. Raiputana and Bhattiana then there is no reason that the earliest home of Aryans couldn't be known as Aryana, Some of the present names of some countries and states like England (Land of English). Afghanistan (Land of Afghans), Baluchistan (Land of Baluch), Tamilnadu (Land of Tamils) Mizoram (Land of Mizos), Nagaland (Land of Naga) etc. are after the majority race or tribe inhabiting such lands. Historians like A. C. Dass, Radhakamal Mukerjee, A. V. Basham support Dr. Gupta's view. To trace the origin of word Harvana is an academic exercise only. In the words of Muni Lal, 'The reader can take his pick, Each interpretation titilates the imagination. Let Haryana be the combination of them all, and inspire every section of its heterogeneous population to achieve the high purposes which most of them symbolize. There may be something in a name if this compound connotation inspires people to bring about unity in diversity.

### Pre-history Period

Haryana constituted a part of the ancient kingdom of Sapta-Sindhu which extended from river Saraswati in the east to river Indus (Sindh) in the west, Besides these two rivers the kingdom was drained by five other mighty rivers of Satluj (Sutdru), Beas (Vipasa), Ravi (Parushni), Chenab (Asuki) and Jehlum (Vitasta). Towards north the boundaries of Sapta Sindhu kingdom transcended the Himalaya to include Bactaria and Eastern Turkistan. At that time the area had a cold climate. References to Haryana in Brahmans and Atharavaveda point towards the antiquity of this region. Kurus are mentioned as prominent people who besides giving the name of Kurkshetra also made this tract the abode of Vedic culture. On this soil Kapil Muni composed his Sankhya Darshana in which he propagated socialism thousands of years ahead of Marx.

King Dushyant, a historic figure was an ancestor of Chandar Vanshi Paurays. He was married to Shakuntala the daughter of Rishi Vishwamitra, A son named Bharat was born to this couple, Bharat's rule (B.C. 2350 to B.C. 2300) extended over an area lying between river Saraswati and Ganga. He is said to have named Hindustan as Bharat. In his lineage at sixth generation king Hasti settled Hastinapur after his name and made this settlement his capital. One of his progenitors Kuru named the Saraswati tract as Kurukshetra (Kuru+kshetra) after his name. King Kuru first of all ploughed fields here on the bank of Saraswati. This means that the then roaming Aryans started a settled life here. In the Kaurav dynasty of Hastinapur two brothers Dhritrashtra and Pandu were born. Dhritrashtra's son Duryodhan ruled over Hastinapur, Pandu had five sons (Yudhistra, Bhima, Arjuna, Nakul & Sehdev) popularly known as Pandavas. They got married to Draupadi, the daughter of Drupad the King of Panchal Desh and demanded a share in the ancestoral Kingdom of Hastinapur. Duryodhan refused to part with even an inch of land. At that time the Arvans had fallen prey to the vice of gambling. Duryodhan somehow or other lured Yudhistra for gamble and in the game won Pandava's part of the kingdom and the victims were sent to 13 years exile. Pandayas spent thirteen years of their exile at various places in Himalaya under many hardships. On their appearance after 13 years Duryodhan still refused to part with any land, Consequently to settle this score the battle of Mahabharata was fought in the battlefield of Kurukshetra for eighteen days. Almost all the kings and warriors from different parts of India participated in this battle in which Kauravas were defeated and Pandavas emerged victorious. The historians are of the view that this battle was fought about fourteen centuries

before the birth of Christ.

### Early History

After the Mahabharta war many far-reaching changes occured in the political picture of India The mighty kingdoms were disintegrated and many principalities, then popularly known as Janpads came into being The north-western part of India contained two Janpads, those of Kuru Janpad (Kurukshetra or Saraswati tract) and Madar Janpad (The tract of Ravi and Chenab), besides the kingdoms of Gandhar and Trigart, Alexandar invaded this part of India but Kuru Janpad remained totally unaffected by this invasion. During the Greek invasions many small republics had started appearing in this part of India. Haryana then was the part of Mauryan empire as revealed by the archeological finds at Sugh and Asoka pillars at Topra and Hissar and his stupas at Thanesar and Chaneti. The disintegration of this mighty empire attracted Bactarians, Greeks, Scythians, Parthians and Kushans as foreign invaders. Yaudheyas an Indo-Iranian clan succeeded in repelling Kushans from the tract lying between Satluj and Yamuna. Instead they established their own rule over this area. Yaudheyas according to Rahul Sankrityayan were true democrats. In their 'village culture' there was no king. Gramiks, the village chiefs, were elected by villagers. To face the foreign invasions later on confederacies of villages were formed. Lord Shiva was their chief diety, His son Kartikey was another god to whom they were devoted, Because of the confederacies (gan) Kartikeya's brother Ganesh was known as Ganpati. Their posterior generation is still recognised in Johiye people living in some parts of Hariana and Bhattiana. These oligarchical cum republican people made Rohtak as the seat of their government. "From the coins discovered at Khokra Kot (Rohtak) it has been established that the Yaudhey territory extended over the adjoining tracts of Uttar Pradesh on one side and Rajasthan on the other, between C. 150 B.C. and A.D. 350. According to the inscription of the Gupta Emperor Samundra Gupta, on the Ashoka pillar at Allahabad, the Yaudheyas paid tribute to the Gupta Empire."4

In the early years of sixth century A.D. the Thanesar Kingdom was established by Pushphhuti. Van Bhatt in his book Harish Charitra gives an account of Pushphhuti and later kings of Thanesar, Harshavardhan (A.D. 606 to 647) was the mightiest ruler of Thanesar who extended the boundaries of his empire to Brahma-

<sup>4</sup> Verma, D.C. Haryana, NBTI, India, New Delhi, 1975, p. 15.

putra in the east and Jehlum in the west. Sindh and Kashmir also formed the parts of his empire. Later on he shifted the seat of his government from Thanesar to Kannauj and attained an unparrallel fame in those days. Chinese pilgrim Huien Tsang who visited Thanesar has left a beautiful account of the prosperity then

reigning in this empire.

The dissolution of Harsha's empire resulted in the emergence of Pratihara and Tomar Rajputs in Haryana. According to Pehowa inscription (A.D. 882) the empire of King Bhoj of Pratihar dynasty extended upto Sirsa and Karnal. The succeeding Tomar Rajputs are said to have founded the city of Delhi. Anangpal's name is associated with the foundation of Delhi. Haryana formed a part of this empire. In this lineage Jajuk's son and Vajrat's son Guga became very popular. Hymns dedicated to Guga are still recited all over Haryana. Guga is said to have been the Jagirdar of Tomar ruler Mahindrapal. Guga and two of his step brothers got constructed three Vishnu temples at Pehowa on the banks of Saraswati. In ancient literature Guga is described as Bhoo-nath (master of land) and even now Bhoo-nath is worshipped on the day of Guga-Naumi, Mention is also found of Bhadankas in the post-Harsha Period who dominated the scene around Rewari, Gurgaon, Alwar and Bhiwani, "It is possible the village of Bhadavasa, near Rewari, may have been their seat of power."5 Some scholars identify these people with Ahirs.

## Medieval Period

With the defeat of the last Tomar ruler Prithviraj Chauhan at the hands of Muhammad Ghauri in A.D. 1192 at Taraori (also known as Tarain) Haryana entered a new chapter of history, during which the Hindu populace of Haryana had to face subjugation, intimidation, humiliation and hardships. At times the persecutions led to total destruction of villages. "It is not an accident that all decisive battles which changed the fate of India were fought in Haryana, at Panipat. Every invader and aspirant to loot and power, after traversing the Punjab had to fight a pitched battle in Haryana before reaching Delhi."6

During the entire period of Delhi Sultanate (A.D. 1206-1526) Haryana consequent upon the ruthless wrath of Turkish rulers of Delhi seethed with rage. Since people could not get good leadership they had to pay a very heavy price of exhibiting disunity

<sup>5</sup> Ibid., p. 16.

<sup>6</sup> Ibid., p. 17.

by the native Rajput rulers in the battlefield of Tarain in A.D. 1192. The Turkish rulers while subjugating the Hindu population of Haryana lost no time in curbing the recalcitrant element thus nipping the seeds of unrest in the bud. By levying heavy land revenue and humiliating taxes like Jeziya on Hindus the Turkish sultans deliberately impoverished and squeezed them so that they could never have the sources to muster courage for rebellion, Whenever fiinding it difficult to make their both ends meet with the residue, farmers started deserting lands. But they were chased and hunted like wild beasts by the imperial forces. To create awe the Hindus were subjected to many restrictions. Some sultans forbade horse riding, carrying of arms and wearing elegant dresses by Hindus. This way they succeeded in their aim of infusing inferiority complex among the masses. The brave people of Haryana who bore it all patiently stoically did snatch some opportunities to revolt against the repressive and domineering rule of Turkish sultans. knowing it fully well that it would lead to still more atrocities, Infact they could never reconcile themselves to the rule of tyranny and wished to overthrow it whenever possible. Following Iltutmisha's death the Hindus revolted and shook the Sultanate for a while creating serious vibrations and oscillations on the administrative set-up. The indirect benefit of this uprising was that the ugly designs of the bureaucrats were foiled and Razia Sultana succeeded to occupy the throne. After the death of Allauddin Khilji a Hindu convert Muslim Khusro Khan became Sultan and put an end to the terror and repression let loose by the Khiljis, His rule in a way was Hindu rule which was put to an end by nobles. Again the Hindus revolted against Muhammad-bin-Tughlaq.

In the year 1398 Haryana tract had to witness loot, plunder, and massacre at the hands of Timur who had come to plunder Delhi, then renowned the world over for its riches. The Jats, Rajputs and Ahirs of Haryana challenged his march towards Delhi at many places. They engaged Timur for about four weaks. Hundreds of thousands of young and brave Haryanvis laid down their lives for putting hurdles to the march of unscrupious and avaracious Mongol horde. In those struggles the affected parts of Harvana not only faced terror and devastation but were razed to the ground. Alas! had at that time the forces of Delhi come to their help the Haryanvis would have never permitted Timur to enter the capital city and create terror and horror by his loot, arson, plunder, abduction and molestation. What an unhappy contrast? The ruler of Delhi advised people not to put up any resistance and flee to save their lives. Even after Timur's withdrawal heroic people of Haryana remained unsubdued, Alam a Meo Leader succeeded in occupying the entire tract between Mathura and Sarai Lado in the vicinity of Delhi.

In the early years of 15th century Sultanate showed the signs of disintegration, intrigues, conspiracies and fissiprous tendencies. The ruling authority lost its hold over much of the Kingdom. In such circumstances of internal dissensions and confusions the Hindus escaped persecution to a large extent. At the same time the 'Bhakti movement' caught hold in India. The soothing preachings of saints like Nanak and Kabir brought comfort and solace to the bleeding wounds of Hindu masses, But this solace was not longlived for the unfortunate Hindus. With the advent of Lodhi rule under Sikandar Lodhi the old tale of repression and persecution was revised rather with much more cruelty and ruthlessness. Under the rule of Ibrahim Lodhi his conspiring nobles and some native Hindu rulers especially Rana Sanga invited Babur, a Chaghtai Turk who was maternally in the lineage of Changez Khan and paternally in that of Timur, two cruel Mongol hordes who laid waste Delhi and north-western India in their times. This led to the historic first battle of Panipat in the year 1526. The Lodhis were defeated and Babur laid down the foundations of a mighty Mughal empire much against the wishes of his so called hosts and also subdued them. This way Delhi became the seat of Mughal emperors who ruled India for more than two centuries.

When Babur came to the throne India presented the picture of a house divided against itself. Many native rulers including Vikramaditya of Gwalior and Sanghar of Phulkian state of Patiala were killed in the field of Panipat while fighting for Babur. On the contrary the common masses of Haryana could not reconcile with the establishment of Mughal empire after finishing the Turkish rule. Just three years after the battle of Panipat the Haryanvi Mandhar Raiputs of Nardak region rose in arms against the Mughals and defeated the local imperial troops. Taking a serious note of the situation Babur sent heavy reinforcements to Nardak which quelled the revolt with great difficulty and that too after a fierce fighting spread over several days. To punish the rebels Babur got many of the rebels slaughtered and their houses burnt. Humayun who kept on tumbling all through his life could not find any time to attend to the skirmishes of Haryanvis. His supplanter Sher Shah Suri a non-Mughal was not opposed to by the Haryanvis. Akbar on the other hand had to face one of the capable and brave Haryanvi generals of the time in the person of Hemu. As his grandfather, Babur was scared of Rana Sangha, Akbar feared Hemu. It was only on the sustained persuasions of Bairam Khan that Jafter much reluctance Akbar agreed to face Hemu on the historic battlefield of Panipat,

In the words of reputed historian Dr. K.R. Qanungo; "No Rajput wielded the sword so bravely against foreign invaders as this humble Hindu of Rewari did on the battlefield of Panipat. No Hindu had been covered with so many glorious wounds on the field of battle except Maharana Sangha," Bania by caste, Hemu was very adept in warfare, This courageous, brave and chivalorous son of the Haryanvi soil had all qualities of a leader and general. But for the chance arrow which struck his eye he would have defeated the Mughal forces. Many historians are of the view that Akbar won the second battle of Panipat (1556) by sheer accident. It seems that Akbar, the greatest of all Mughal emperors remained unhappy and averse to the people of this tract on account of their rebellious nature and love for independent views,

Harvana tract remained comparatively quiet during the times of Jahangir and Shah Jahan. Pleasure loving Jahangir did not disturb the village life and contented himself with the mere collection of land revenue. Shah Jahan the great builder could hardly find time to devote towards native repression. But Aurangzeb the last Great Mughal and orthodox Muslim once again started repeating Sultanate history. The entire Punjab under Guru Gobind Singh and Maharashtra under Shivaji revolted against Aurangzeb. The Jats of Agra, Mathura and Bharatpur and Satnamis of Narnaul also revolted against Aurangzeb, Under their leader Raja Ram, the Jats created a sort of terror for Mughal authorities. They started looting royal caravans on the highways. So much so that they plundered the tomb of Akbar at Sikandra also. Alarmed by the activities of Jats Aurangzeb gave them a continuous and hot chase. Jats quietened themselves for a while only to regain their activities under Churaman, a nephew of Raja Ram. Even after the death of Aurangzeb, Jats continued their rebellious activities and Bahadur Shah recognised Badan Sing successor of Churaman as Raja of Dig. Suraj Mal a brilliant successor of Badan Singh founded the state of Bharatpur in real meaning. Undoubtedly the greatest warrior and ablest Jat administrator of his time, Badan Singh has been often called the 'Plato of Jat Clan'. Besides Bharatpur, he held his hold over Agra, Mathura, Dholpur, Mainipuri, Hathras, Etawah, Aligarh, Meerut, Rohtak and Gurgaon. The turmoil which followed Aurangzeb's death, however, caused much harm to the Haryana tract. The invasions of Nadir Shah Durrani and Ahmed Shah Abdali still further aggravated the deteriorating condition of Haryana. At this time Marathas, Sikhs and Afghans appeared very active in and around Delhi. Though Afghans defeated Marathas in the third battle of Panipat, yet they could not get political hold over Delhi. In a way Afghans did not have the resources to rule over

Delhi while the Marathas lacked political cohesion and thereby a path was paved for British supremacy in the years to come. At this time a very interesting incident took place in Haryana, George Thomas, an Irish who served in Maratha forces for some time, took benefit of the chaos and confusion that prevailed at that time. He proclaimed his rule over an area around Hansi and called himself as the 'Raja of Haryana' but faced failure in his ambition shortly. Delhi and Haryana at that time were surrounded by many active and warrior clans like Sikhs, Jats, Rajputs, Meos and Gujars but they never united to form a common front. British in their efforts to gain supremacy tried to bring Shah Alam the figure head Mughal ruler under their influence, They granted the emperor with a personal allowance of Rs. 6,000 per month to be realised from the 'Assigned Territory' located on the west of Yamuna in Haryana tract.

After Marathas' failure and their consequent withdrawal to the South, British established themselves in Delhi Territory including most of present Haryana in 1803. They immediately took steps to strengthen their administration over the territory held by them. They abolished sati, capital punishment and gradually abolished corporal punishment. Settlement of land was also completed. The ancient canal system defunct by this time was revived. The village institutions like Panchayats were honoured. With a sort of paternal care the British desired and worked to improve the rural lot. But the martial tribes who predominantly inhabited the territory offered resistance at many an occasion to British also. "They regarded the British as no better than usurpers and plunderers. The Meos, Gujars and Ahirs of Gurgaon, the Jats and Rangars of Rohtak, the Bhattis, Ranghars, Panchhadas, Bishnois and Jats of Hissar and the Sikhs of Karnal, all of them were strongly opposed to the new regime."7 Strong forces were sent to quell these people, but in the words of Metcalfe the then administrator of Delhi, the resistance put up by these heroic warriors could not be met with the Delhi forces and strong reinforcements on SOS basis were called from other districts. So much so that land revenue too had to be collected with the aid of army. These martial people often took armed offensive tactics and kept the British troops always engaged. They very often defied the authority of British officials.

# First War of Indian Independence

As is evident from the above description the British rule in rural Haryana became very unpopular. On the other hand the British

got enraged from the ever increasing skirmishes with martial people of Haryana and in turn started adopting repressive policies. Land revenue assessment was given a higher dose and implemented with a strong hand. Interference with the age old institutions like Panchayats, which had worked smoothly for many many years, caused widespread discontentment. So much so that water logging caused by excessive canal irrigation also resulted in unrest among farming community. Food crops and fodder crops grown on water logged areas not only gave lower yields but also proved detrimental to the health of people and cattle alike, "Another adverse effect was the change in the salubrious climate of the region. The peasants were convinced that excessive irrigation caused impotence and the unfruitfulness of women in canal villages was attributed to this. Jats of dry areas refused to give their daughters to the men of Panipat and other heavily irrigated places."8 This led to the migration of many farming families of these areas to the dry areas of Jind. The work of missionaries, economic exploitation and negligence of the government during famines and recurring epidemics still added fuel to the burning fire of fury. Under such strained circumstances the people were simmering with rage and discontentment, and only a spark was needed for the situation to assume a bursting and ambersome form, This much needed spark was supplied by the rebel soldiers of Meerut and Ambala cantonments.

The spokes of conflagration spread in all directions from Delhi, and the Haryana tract in an overnight came in the grip of struggle. Mewatis of Gurgaon were the first to join hands with revolting soldiers. Clifford at that time was the assistant collector of Gurgaon. "Clifford's sister was stripped naked at the palace, tied to the wheels of a gun-carriage, dragged along the Chandni Chowk in Delhi and then, in the presence of the King's sons, cut to pieces. Clifford went on the rampage and burnt village after village destroying the countryside with fire and sword. But his ruthless revenge did not last. He was killed by the Meos of Raisina and Muhammadpur."9 At Hodal the Jats created an alarming situation. Though Delhi fell to the Imperial forces on 20 September 1857 yet Gurgaon continued to be ablaze even after that. Next month and half saw many conflicts between the British troops and Meos, Gujars, Ranghars and Ahirs of Haryana, Brigadier General Showers arrested the revolting Nawab of Jhajjar Abdur Rehman while his three revolting sons and brother escaped the British hands and sought shelter with the rebels at Ludhiana, The Nawabs of Dadri and

<sup>8</sup> Ibid., p. 35.

<sup>9</sup> Ibid., p. 28.

Farrukhnagar as also the Raja of Ballabgarh were also taken as prisoners by the British General. Their forts and garrisons were occupied by imperial forces while the native forces were disarmed and dispersed.

Revolt in Rohtak broke out on 24 May 1857 when Tafzal Hussain attacked government offices in the name of Mughal emperor Bahadur Shah Zafar. Finding the situation out of control the British Deputy Commissioner Loch took to heels and reached Delhi via Gohana, Tafzal Hussain got one lakh rupees by way of looting treasury and on his way back burnt all British establishments at Sampla. But the saddest part of this period is that taking benefit of general chaos and confusion people revived their old rivalries. The factional fights among various castes of Haryana could not be stopped even by a royal decree (firman) issued by the Mughal emperor Bahadur Shah Zafar. "There were free fights during the Mutiny among the neighbouring villages. The Dahiya and Dalal Jats revived their old rivalry and clashed fiercely with each other around Hassangarh, The Ahlawat Jats attacked Sampla and Baroda. Madina attacked Kathura, Butana destroyed Nurankhera; and all the headmen were hanged for attacking a military convoy. Sanghi and Khidwali were traditional foes and engaged each other in continuous fights; some Mehim villages on the Hissar side attacked those on the west border of Rohtak; the Ranghars plundered everyone irrespective of clan and loyalty."10 This factor added to the causes of failure and also hastened our defeat in the First War of our Nation's Independence. Had these martial races stood unitedly as one man and one force they would have engaged a sizeable number of British troops and thereby reduced their pressure on Jhansi, Oudh, etc., and the current of history might have taken a different turn.

At Hissar the uprising was started by the revolting troops of Hansi, Sirsa and Hissar garrisons. The troops incited and persuaded the civil population of Hissar to plunge in the sacred struggle against the foreign yoke. The people and troops killed British, looted and destroyed the property of Europeans and of the so-called loyal native rulers. Muhammad Azam a prince of the royal family proclaimed the end of British rule in Hissar. After initial successes the prince moved to Delhi to help the rebels. In his absence Sir John the Deputy Commissioner of Ferozepur seized control over Hissar again. Hearing this news Azam came back but it was too late. He had skirmishes with the British troops at many places, but ultimately lost. Azam proceeded to Gurgaon and there with the collaboration

of Rewari ruler Rao Tula Ram revived the anti-British struggle in Ahirwal. Soon after the revolting forces reached Narnaul to participate in a much contested battle. In this most fiercest and decisive battle the leadership to freedom fighters was provided by the Haryanvi stalwarts like Raja Nahar Singh of Ballabgarh, Nawab Abdur Rehman of Jhajjar, Rao Krishangopal and Rao Shehmat Khan of Mewat. The sole stirring bravery of Indian fighters put up a formidable resistance, but the British troops that were larger in number and superior in armoury finally won the battle at Narnaul. Raja Nahar Singh and Nawab Abdur Rehman were hanged. Rao Shehmat Khan was shot. Rao Tula Ram went to Afghanistan via Persia and there he died in the year 1863. Rao Tula Ram was sent to Afghanistan to secure help in accordance with the meeting of freedom fighters held at Kalpi under the Chairmanship of Tantya Tope. Indisguise he reached Kabul via Bombay and Basra. His smadh can still be seen near the 'Delhi Gate' in Kabul. The properties of such famlies were confiscated and awarded to those Indians who remained loyal to their British overlords. In short Delhi and Harvana were put to the severest punishment at the hands of so-called 'civilised and most cultured white race'. With the reverses at Narnaul the case of freedom fighters in Harvana was lost. British brought the whole situaation in Narnaul under their control by November 1857. Moreover, the neighbouring native states of Puniab helped the British with their resources and forces. Had these native states not supported the British in this hotly contested battle the results would have been different. The British in their turn amply and liberally rewarded the loval native states. Narnaul district was gifted to Maharaja Patiala who renamed it as Mahendragarh after his own name. Nabha, Jind and Faridkot states got respectively Bawal, Dadri and Ballabgarh. Farrukhnagar and Pataudi were created as new Jagirs. "At the end of the rebellion, Harvana suffered the usual convulsions of defeat, as did other regions. Normal human liberties reached the vanishing point. The British took heartless punitive measures against all those who were known to have participated in the uprising. Many chieftains and their supporters were sent to the gallows on pretence of legal compulsion. The people reeled under the callousness of it, but never did they lose faith in themselves. They had learnt over the centuries to take spells of good and bad fortune in their stride."II

## British Period

After the war of Independence, to check the recurrence of rebellious activities as also to reduce its importance Haryana was separated from the then North West Province (now Uttar Pradesh) and merged with Punjab. The seven districts formerly part of Delhi Territory were regrouped into two divisions of Delhi and Hissar popularly known as Eastern and Western division respectively. On the other hand the administration of Haryana alongwith the entire country was transferred from the East India Company to the Crown. A Viceroy, as a representative of the British Crown and Parliament, started ruling India.

Many administrative changes were effected in the newly created divisions to conform to the administrative pattern and needs of the Punjab province to which Haryana was merged. Money lenders squeezed the rural masses of this part for the past so many centuries and to the misfortune of rural inhabitents their grip and clutches tightened during famines and epidemics when the poor, tottering farmer needed the money most. Money-lenders had been playing many frauds with the illiterate, ignorant and innocent farmers and managed their net in such a way that a farmer who once came under money-lenders' net could not get out of it for many generations. In those days the Haryanvi farmer was born in debt, lived in debt and passed away in debt passing on the ever increasing burden of the debt to his posterity. In 1863 orders were issued for the moneylenders to maintain proper and regular accounts to check the irregularities committed by them Deputy Commissioners replaced the magistrates and collectors as head of the district administration. To strengthen the position of law and order, police control was overhauled and tightened. For the administration of justice chief court was set up at the capital whereas Munsif courts were set up at tehsil level. But since the region was populated with turbulent tribes with independent disposition it took time for the state of affairs to improve. Cattle stealing and armed robbery in daylight were practised in many parts of the region. But slowly and gradually the British administration got control over these people.

On the educational front some measures were taken. At important places like Delhi, Rohtak, Jhajjar, Karnal and Rewari high schools were opened. A Government College was also started at Delhi which was shifted to Lahore after about a decade and a half. But soon after the St. Stephens College and Hindu College affiliated to Panjab University were started. On the other hand canals were excavated and existing ones were improved upon. The railway tracks were started to be laid down in some parts of Har-

yana. Road construction also started in many parts of the region. These economic, political and social reforms in an indirect way brought the Haryana masses in close touch with the social reformers and nationalists.

The establishment of Arya Samaj by Swami Dayanand Saraswati brought a new awakening among the Haryanvi masses. Through the slogan 'Back to Vedas' he urged the people to care for their own rich cultural heritage and avoid western ways of life, Swami Dayanand also spread and preached the cult of nationalism. He categorically declared from many a public platform that 'Swaraj' or selfrule was superior to any foreign rule howsoever benevolent it might be. Arya Samaj movement which had its sway in Punjab and Harvana towns slowly and gradually seeped to countryside too. It became very popular with Jat farming community. L. Munshi Ram, later on known as Shardanand, a founder of Gurukul Kangri spread the teachings of Arya Samaj practically to all the homesteads of Harvana. As a social worker and religious leader he is rated second only to Swami Dayanand in this movement. Before the advent of Congress on the scene of active politics, Arya Samai was considered as a political movement in Haryana. The movement through its leaders, public meetings and newspapers brought about political and social awakening among the peasantry of Harvana hitherto drowned in the abyss of ignorance. The spirit of disaffection rapidly spread among the educated class and especially among the teachers and lawyers. Punjab government started suspecting the activities of the Arya Samaj. The British Government of India on the advice of Lieutenant Governor of Punjab extended the seditious meetings act to certain parts of Haryana, Government increasingly started feeling the Arya Samaj effect that crept even among the soldiers. To begin with the government discharged prematurely, retired or dismissed those Haryana non-commissioned officers and soldiers who were suspected to spread the nationalist cult among the soldiers. Slowely and gradually the recruitment of Harvana Jats to armed forces was stopped.

The suspicious attitude of the government was, however, thrown to the winds at the time of First World War. In the dire need of fighting forces the British authorities ir Indiawished to enlist in the army each and every able bodied youngman hailing from martial communities. By their tactful policies the British had by now reduced the village folk to abject poverty and the people at many places found it difficult to make their both ends meet. Under such circumstances people had no option but to join forces to face death in the form of bullet on their chest rather then hunger in the stomach. The martial communities enlisted in army in greater numbers from Haryana. On the other hand also people in the country sympathised with the British during First World War. The nationalist movement which had gained momentum by this time in India openly preached for British help with a faint hope that India might be rewarded with the right to self government after war, Mahatma Gandhi also quietly worked for British support much against the wishes of radicals (inside and outside the country) who wanted to avail this opportunity to overthrow the foreign yoke. The martial law and atrocities committed on peaceful masses at some places in Punjab including an uncalled for, brutal and ruthless massacre of hundreds of men irrespective of age, sex or religion at Jallianwalla Bagh completely changed the picture. The leaders and masses rose in disobedience to the British authorities in India whom they had given all support in men, money and material at the war front. The British Government in India had now few supporters and the atmosphere became quite hostile towards alien masters.

In rural Punjab (Haryana was then a part of Punjab) the people who had sent their sons on the war front, many of whom laid down their lives not for the motherland but for foreign masters, expected that the masters would see reason and amply reward their sacrifices. The government responded only by providing separate seats to rural areas in Legislative Council on the basis of population. Consequently the 1921 election saw majority of rural representatives in the Legislative Council. But unfortunately on the instance of intriguing British authorities who always practised the policy of 'divide and rule', under the Dyarchy reforms, cabinet was constituted on communal basis. This policy ultimately led to the division of Punjab on communal basis after a lot of holocaust caused by communal riots. For sometime Fazal-i-Hussain represented the Muslims whereas Ch. Lal Chand (the initiater of separate rural constituencies) represented the Hindus and Sikhs. But in 1924 Ch. Lal Chand had to resign on an election petition. As a result thereof Ch. Chhotu Ram, the budding Unionist leader replaced Ch. Lal Chand in Punjab Cabinet.

The Unionist party dominated the Punjab politics for about 22 years till 1946 and Ch. Chhotu Ram steered the ship of Unionist party all through this period. The then Governor of Punjab Sir Malcom Hailey wanted to break the Unionist party. So in 1926 he appointed Feroz Khan Noon in Fazal-i-Hussain's place and the latter was sent to Centre as member of Governor General's Council. The Governor this time dropped Ch. Chhotu Ram and replaced him by Lala Manohar Lal in the Cabinet. Sir Joginder Singh was also added to the Ministry to give representation to

Sikhs. This way he paved the way for communal disharmony.

The nationalist movement spearheaded by Congress in many parts of India started affecting Harvana also. Those people who were the torch bearers of Arya Samaj movement came forward to embrace Congress ideals and apprise the general masses about the freedom struggle launched by Congress stalwarts like Gandhi. Nehru, Tilak, Patel, Bose, Azad, etc. Lala Lajpat Raj had started his career as a lawyer at Hissar. For several years he led the Arva Samaj movement in Haryana, He came in contact with the radical leaders like Bal Gangadhar Tilak and Bipin Chandra Pal. The clarion call given by Bal Gangadhar Tilak "Swaraj is my birth right : I shall have it", was cheerfully greeted by Lala Lajpat Rai, On these principles Lala Lajpat Rai started a campaign against the foreign rule in Punjab-Haryana. Lala ji's association with Bal Gangadhar Tilak and Bipin Chandra Pal was widely acclaimed all over India and this trio was given a popular name of 'Bal-Pal-Lal' by Indian masses. To give a spurt to his nationalist activities he shifted to the capital city of Lahore. At Lahore he organised a mass protest, as a part of countrywide protest, against the arrival of Simon Commission in India. Leading a huge rally raising slogans of 'Simon Go Back' Lalaji faced innumerable lathi blows of British Police under the orders of Saunders, a British police officer. Later on he succumbed to his injuries on 19 November 1926 caused by severe lathi blows and warned the British authorities from his death bed that each lathi blow on his body would prove a nail in the coffin of British Empire.

Pandit Shri Ram Sharma an enthusiast from Rohtak joined the Congress ranks in 1920 while he was a school student at the first call on non Co-operation. After Lala Lajpat Rai had left for Lahore Pandit Shri Ram Shrama organised the nationalist movement in Haryana under the banner of Congress. Dr. Gopi Chand Bhargav and his brother Thakur Das Bhargav also started anti-British campaigns in Hissar. Similarly Lala Shyam Lal from Rohtak and Pandit Neki Ram from Bhiwani initiated a nationalist movement aimed at ousting the foreign rulers from the sacred soil of India. Dr. Gopi Chand Bhargav also shifted to Lahore to closely associate with Lala Lajpat Rai.

In 1937 elections held in Punjab under the act of 1935 the rural areas overwhelmingly voted for Unionist Party. Sir Sikandar Hayat Khan became the first Prime Minister of Punjab while Sir Chaudhari Chhotu Ram was given a senior position in the cabinet. The ministry as a whole agreed to work for Unionist party's programme of agrarian reforms launched by Sir. Ch. Chhotu Ram, Sir. Ch.Chhotu Ram is deemed to be the greatest leader Haryana has

produced in this century. He rose from very humble beginning to a position of pride in Punjab politics. Like Mahatma Gandhi his 'Swaraj' consisted in the economic and social emancipation of illiterate and innocent village masses. Throughout his carrier he worked for the uplift of peasanty. Steps initiated by Sir Ch. Chhotu Ram with regard to village money-lenders and for the uplift of farming community in Punjab at that time are still recalled by economists and leaders with pride. A sole representative of agriculturists in the then Punjab politics he became a symbol of opposition to all forms of exploitation. Today when Haryana has launched a multipronged attack against rural exploitation and has been doing her best to bring prosperity in the villages, the state is silently paying homage to Sir Ch. Chhotu Ram whose striking mission in life was rural uplift. Had the powerful vested overlords not stood menacingly in his way, he would have surely achieved his aim to a larger extent.

Sir Khizar Hayat Khan Tiwana succeeded Sir Sikandar Hayat Khan as Prime Minister of Punjab on the sudden demise of the latter in the year 1942. Before his death Sir Sikandar Havat Khan had committed to Muhammad Ali Jinnah, the Muslim League Stalwart, to support the league manifesto. In the year 1944 Jinnah came to Lahore and insisted upon the new Prime Minister Sir Khizar Hayat Khan to change the label of his ministry from Unionist Ministry to Muslim League Ministry. This led to a clash between Unionist leaders and Muslim League leaders particularly between Sir Ch. Chhotu Ram and Mohammad Ali Jinnah, Sir Khizar Havat Khan had a great regard for Chaudhari Sahib and his progressive policies. Hence he refused to bow down to Jinnah's demands, But this sudden trend in Punjab politics was taken too much to heart by Chaudhari ji who fell ill at Lahore and passed away soon after. This way a great son of the Haryanvi soil died in harness. This goes to the credit of Sir Khizar Hayat Khan that after Chaudhari Sahib's death he refused to be brow beaten by the League leaders and continued firmly the secular rath as shown by Sir Ch. Chhotu Ram and resisted all communal onslaughts. Though left single handed Sir Kizar Hayat Khan again headed the Punjab Ministry in 1946 with Congress support much against the League opposition. But in March 1947 when the situation in Punjab reached an alarming state of no return he had to resign. Thereafter Punjab came in the grip of communal violence and nobody howsoever dominating he might have been, could save this mighty state from a worst holocaust. No doubt India threw off the foreign voke at the stroke of Zero hour on the midnight, separating the tail end of slave period, of 14 August 1947 and the dawn of Independence beginning on 15 August 1947 yet the hearts of about two crores of people bled with the agony of being driven to leave their hearths and homes in Punjab and Bengal. Punjab received about 50 lakh refugees many of them barely in three clothes with uncertain open jawed future. These unfortunate brethren of ours with no shelter over their heads except the vast sky, which too in those days very often gave a shower treatment; enoughly scanty or no food at all; insufficient but tottering clothes were taken aback by "Independence." At this horrible sight the authors of Free India and Pakistan stood aghast, speechless as well as helpless. They had not even dreamt of such a serious communal frenzy. Majority of the victims would have prefered a status quo, had they been warned of these untold miseries and asked for option. What an irony of fate? The foreigners who ruled over us for about two centuries and impoverished this Golden Sparrow of all its riches at last agreed to accord us self rule but no body knew that they had been sowing the seeds of discordance and hatred between two major communities of India in persuance of their policy of 'divide and rule' for the last many years the consequences of which would be detrimental to a large sect of humanity. But inspite of vast human sufferings India became free and got a truncated Punjab in the form of 'East Punjab' of which Haryana region was a part,

## Post-Independence History

After partition East Punjab (later on only Punjab) was headed by Late Dr. Gopi Chand Bhargav. He was soon replaced by Shri Bhim Sen Sachar. Infact both these leaders continued to have the reins of Punjab in a sort of unstable atmosphere till late Sardar Partap Singh Kairon came on the scene in 1956 and gave a stable administration. But Haryana felt unsatisfied in the lack of enough participation in the state craft, Moreover the central parts of Punjab got larger share in the development as a result of which Harvana tract along with Kangra and other hilly areas were losers. On the other hand Sikhs, though they had major share in the state affairs, wanted a state in which they could have complete domination, Hence these diverse feelings among the Sikhs and Harvanvi Hindus slowly and gradually sowed the seeds of bifurcation.

The idea of a separate state for Haryana as well as a separate Sikh dominated state of Punjab is quite old. Till first war of Indian Independence, Haryana tract was the part of Delhi Territory. After the sad failure of this bold attempt Haryana was attached to Punjab on strategic and political grounds. But the Haryana tract continued to have closer affiliations and affinities with Delhi rather than with Lahore. At one time a proposal was mooted to carve a separate Hindu majority state in the Jullundur and Ambala divisions in the then United Punjab of pre-partition days. But it could not materialize. Again in pre-Second War period no less person than late Asaf Ali, who enjoyed confidence and reputation among Congress stalwarts, sponsored the idea of forming 'Greater Delhi'. His greater Delhi included much of present Haryana. Among others, Late Deshbandhu Gupta the editor of Tej supported the idea. They would have pursued their proposal quite vigorously but the outburst of War placed a moratorium on such activities. After the war the atmosphere in the country had completely changed and there was no room for such petty deals in the Congress programme which was fighting tooth and nail for the ouster of British from Indian soil.

On the other front few years before partition the Akali leader Late Master Tara Singh formulated a scheme for getting 'Azad Puniab' for the Sikhs on the lines Muslims were working to attain Pakistan. He wanted to separate the areas of West Puniab and Harvana tract from the then United Punjab and get the remaining part as a separate and independent entity. This proposal was very strongly opposed and condemned not only by the national leadership but many farsighted and patriotic Sikhs also. After Independence some of the Sikh leaders were not satisfied with the new State of East Funjab which constituted the majority of Hindus. Many Sikh leaders and especially Master Tara Singh wanted now a Sikh majority state within the framework of Indian Union. As a legacy of the idea of Greater Delhi and dissatisfaction because of less involvement of Harvanvis in the state craft some people in this part raised a demand for a separate Haryana State, sometimes called as 'Vishal Haryana', i.e , Greater Haryana. Master Tara Singh and his Akali party wanted a separate state in which besides Sikh majority, Punjabi would be not only the mother tongue but official language also. But the then Chief Minister of Punjab Sardar Partan Singh Kairon wanted a 'Maha Punjab' i.e. Greater Punjab with the merger of PEPSU (Patiala and East Puhjab States Union) and hilly territory of Himachal Pradesh.

In 1955 Government of India set up a State Re-organisation Commission with Fazal Ali as Chairman. The Commission considered the demands and counter demands as rising in Punjab at that time and were unanimously of the view that Punjab should not be put to division and on the contrary it recommended the merger of PEPSU with it. On November 1 1956 a new Punjab with more area and extended boundaries came into being. Sardar Kairon in a way spread the use of Punjabi, and now Punjabi was taught in

schools right from Narnaul in the sands to Lahul-Spiti in the snows, But this did not solve the problem at all. The Akalis revived their demand for a separate Punjabi speaking state. To counteract the Akali movement the protagonists of Hindi started a 'Hindi Raksha Andolan', i.e., Save Hindi Movement. Consequently this brought in a demand for the creation of a separate Hindi speaking State especially by those living in Ambala division. These people were not willing to accept Punjabi either as a medium of instruction or as official language. The Government of India was pressed very hard by the fasts and counterfasts undertaken at that time in different parts of the Punjab. The Government yet made another attempt to avoid the further vivisection of Punjab. In 1960 'Regional Formula' was introduced as a solution to solve the language tangle. The formula aimed at giving due weightage to both Hindi and Punjabi languages in Hindi and Punjabi speaking areas without breaking the unity of the State. Hindi and Punjabi speaking areas were clearly demarcated and were recognised as separate linguistic regions without affecting the administrative boundaries of Punjab. Puniabi as well as Hindi were accorded official status upto district level. Both the languages were introduced as media of instruction in schools, colleges and universities at the option of students. Hindi speaking candidate had to study Punjabi as a second language upto matric level while Punjabi speaking pupil had to study Hindi as a second language upto the same level. Regional committees consisting of legislators from respective areas were formed to supervise and help in the running of regional scheme. But this too was not a fool-proof solution. It did not work properly as it was only a halfway measure. Consequently in each region (excepting district Kangra) demand for a separate State based on linguistic basis mounted up. The situation took such a serious turn that in major cities language riots broke up in the early months of 1966 inspite of the fact that Government of India had already set up a Parlimentary Committee under the chairmanship of S. Hukam Singh the then Lok Sabha Speaker to study the question of the demand for a separate Punjabi speaking State. The Government which had already shown its good intentions properly and timely dealt with the language riots which had taken the ugly shape of communal riots. S. Hukam Singh Committee submitted a report recommending the creation of a Punjabi speaking state and proposing the formation of Haryana Prant as well.

The Government of India accepted the said report in March 1966 and set up a three man boundary commission under the Chairmanship of Justice Shah of the Supreme Court, The Commission recommended to carve out the Hindi speaking areas out of

existing Punjab and constitute it as Haryana but the Hindi speaking mountainous areas of the erstwhile Punjab were recommended to be merged with the adjoining hilly Union Territory of Himachal Pradesh. The remaining Punjabi speaking area was to constitute Punjab. But there arose a controversy on one of the recommendations of the Commission. By a majority decision the Commission recommended that whole of the Kharar tehsil including the newly built city of Chandigarh should form part of Haryana State. But this was not acceptable to the reconstituted Punjab State. To solve this issue Government of India framed out a via media. The Kharar tehsil was included in Punjab and Chandigarh was made a Union Territory where both the provincial governments could have their capitals. Consequent upon this decision the new states which were scheduled to be inaugurated on Mahatma Gandhi's birthday in 1966, however, came into being on 1 November 1966. But Akali Leadership which had been insisting on the inclusion of Chandigarh in Punjab, revived its demand after sometime on the plea that Chandigarh had been built as Capital of Punjab, Late Sant Fatch Singh started a hunger strike with a threat of self immolation if his demands were not met by 26 January 1970. In those crucial days former Prime Minister of India, Mrs. Indira Gandhi played a major role in dissolving the tangle. She had detailed discussions with the emissaries and leaders of both the states. She announced her decision, popularly known as her award, on 26 Jan. 1970 and the same was accepted by both the State Governments. According to that award Chandigarh is to be included in Punjab whearas Abohar and Fazilka areas are to be merged with Haryana. The State of Haryana was guaranteed an assistance of Rs. 20 crore (Rs. 10 crore as grant and Rs. 10 crore as loan) for the construction of capital. The award had to be implemented after the expiry of five years. Five years have passed and the decision is yet to be implemented. The Government of India have amply made it clear that while it stands by its decision, it will welcome any decision acceptable to both states and arrived at jointly by both the states. Now since in both the states Congress governments are in office and are working hard for the economic prosperity of the states they have little time for reviving old squabbles. This is very much in the interest of a common man who is interested in his welfare and not in the fact that who governs him and from where? In the present atmosphere of the country where many long standing disputes like the ones relating to the sharing of river waters have been solved almost to the utmost satisfaction of all the concerned parties it is hoped that this issue would also be solved amicably.

The new state of Haryana which came into being on 1 Novem-

ber 1966 saw lot of instability on the political front in its initial years. Though poor in basic resources the Central Government desired that this newly carved out, geographically homogeneous unit should march on the way to rapid progress. But the hopes of the national leadership seemed to be foiled by the lot of horse trading that this state witnessed during the first one and a half years. Bhagwat Dayal Sharma became the first Chief Minister of Harvana. Till the general elections in February 1967 he continued in office but this government was a house divided against itself. The plethora of opportunism, personal jealousies, political immorality and defections made a mockery of the democratic system of government. After the election Bhagwat Dayal Sharma again went into the saddle but only for thirteen days. The Vishal Haryana leader Rao Birendra Siagh toppled Sharma ministry with defections. Rao gave an eye catching slogan of having a Vishal Haryana, i.e., Greater Haryana by making a demand to include the adjoining areas of Rajasthan and Agra and Meerut divisions of Uttar Pradesh. But he also fell prey to the game of horse trading which he had initiated earlier. Under the shadows of horse trading there could only be misrule, and not rule. This was quite detrimental to the infant state. But Haryana was very fortunate in having a Governor in the person of Late Shri Birendra Narayan Chakravarty an experienced Civil servant cum diplomat of repute. Keeping in view the highest traditions of impartial administration he studied the situation in depth and recommended the promulgation of President's rule and also recommended the dissolution of state assembly. He was detested with the state of affairs prevailing then in Haryana, Within eight months after the general elections of 1967, 44 out of 81 legislators defected. The saddest part was that many defectors did not stay long even in the new party. Aaya Ram (incoming member) became Gaya Ram (outgoing member) in no time. One legislator defected five times, two four times, three thrice, four two times and 34 once.

The mide-term polls to Haryana Assembly were held on 12-14 May 1968. Congress won a clearcut majority in a house with 81 members. Many persons were in the field to take reins of the government in their hands. The Congress High Command which was already sad with the last experience wanted to have a clean start. It only asked the legislators to elect a leader from the elected members and particularly a non-controversial person, On the advice of Shri Gulzari Lal Nanda and Shri Bnagwat Dayal Sharma the choice of legislators fell on untried politician, a Bhiwani lawyer, Chaudhri Bansi Lal.

Chaudhari Bansi Lal was considered to be a very strong Chief

Minister and he was ranked with Late S. Partap Singh Kairon in his push and drive as a Chief Minister. He was quite uncompromising on issues of national interest. He steered the young state of Haryana on a road to revival, reconstruction and prosperity. It is popularly known that Chaudhari Bansi Lal worked day and night for the uplift of Haryanvis. Inspite of the criticism which he faced in and outside the Legislative assembly the credit goes to him for such a speedy development of Haryana, Although many excesses are alleged to have been committed by Chaudhari Bansi Lal, yet the tempo of development witnessed during his time in Haryana has remained unparallel so far. As far as the rate of economic growth is concerned no state in India has surpassed or even matched Haryana. Haryana is just ten years old but the progress shown by this state during one decade has not been seen in other states some of which are about three decades old. Haryana which was a defecit state on its birth has emerged to be a surplus state today. The countryside in Haryana is continuously humming with agricultural operations, industrial activity, tourist spots, wide metalled roads, lift irrigation schemes, tubewells, electricity, crowded educational institutions, largely attended health and family planning centres, etc., The credit for all this multi-faced development goes to Ch. Bansi Lal. But it seems that the power he weilded and popularity he won went to his head. A stage came when he turned ear to sane advice and shielded the guilty persons including his own son. The Rewasa Case and excesses in family planning drive committed at his and his son's instance told heavily on his political career. Once a strongman of Haryana lost the faith of people in his own constituency which he had been nursing. And he lost to his former cabinet colleague, Mrs. Chandravati, whom he had dismissed from the cabinet for no fault of hers. This shows that the Indian masses and particularly the rural masses have politically become wide awake. At present the reins of the government are in the hands of a sober looking but strictly disciplinarian and illustrious statesman Shri Banarsi Das Gupta a close associate of Ch. Bansi Lal. Shri Gupta is streneously working to complete the projects left unfinished. Shri Banarsi Das Gupta, it is believed will not lack behind his friend, philosopher and guide Ch. Bansi lal in the development of the state and would work zealously to make Haryana lead in many fields,

# Physical Environment

With an area of 44,222 square kilometres the new and young state of Haryana is located in the northern part of India. On its east is situated the most populous state of Uttar Pradesh while in its north-east is found the orehard state of Himachal Pradesh. Punjab the state of adventurist farmers and toiling workers is located in the north-west of Haryana. Rajasthan with its rich cultural heritage and history replete with most heroic deeds bounds the State of Haryana on south and south-west. Geographically the boundaries of Haryana are found in river Ghaggar in south-west, Shiwalik hills in north-east, river Yamuna in east and Aravali Hills in south and Thar desert in south-west.

## Relief

Greater part of Haryana forms the part of Indo-Gangetic plain of the sub-continent. Geographers now demarcate Haryana as 'Haryana tract' as a sub-division of Punjab plains. With the exception of outer Shiwalik ranges in Ambala district (north-east) and Aravali ranges in Mahendragarh and Gurgaon districts (south) the entire Haryana is a broad level plain located nearly on the watershed separating two drainage systems.

Geologically speaking much of the tract dates to recent geological history. It was towards the last era of geological history that silting action of the streams over a wide area gave birth to this almost a featureless plain. Although no major physiographic prominences are found on this plain yet it may be termed as an undulating plain, "The existing or former courses of the streams provide somewhat lower areas which are interspersed by the interfluvial regions of slightly higher elevations which are termed locally as Bangar, Dhaia, or Nardak. At places sand dunes and sand ridges occur in these interfluvial zones."1 South-western part of the state is sand swept and also unproductive tract. The shifting sand dunes and sand storms have played havoc with this region. The southern parts of Hissar and Bhiwani districts are characterised by shifting sand dunes with interruptions of either firmer or loamy bottoms at many places. This sand swept tract is termed as Bagar in the local usage. This treeless rolling desert is the most backward area of the state. Huge amounts of sand blown by the wind are piled up several metres (6 to 7 m.) above the local low lying flats termed as tals. The monotony of this arid topography is broken by rocky projections only. A 'Green Belt' is being created here to check the advance of Thar desert in Haryana. Water is quite scarce and brackish here and even the drinking water has to be transported over long distances.

The plain area is further sub-divided into two parts. Those parts of the plain which are even now flooded during rainy season and are covered with newer alluvium every year are termed as *Khadar*. The Khadar of Yamuna is quite significant a part which lies in between the present water course of the river and old high bank of the abandoned course. Khadar region is quite narrow in Ambala district but attains a width of about 16 km. in Karnal district. Again having a broad zone in the Gurgaon district it narrows down quickly in the south. The area which used to be once flooded by streams, but now because of the rivers having shifted their courses lies away from flood-courses, is termed as *Bangar*. The latter areas show comparatively higher elevations above mean sea level. It is the Khadar and Bangar tract of Haryana that is of vital economic importance for this state since it supports a dense population of the province by way of its agriculture.

The sub-mountaneous part of Ambala district consists of Shiwalik ranges which are of recent origin. The geologists are of the

<sup>1</sup> Jauhari, A.S., 'Punjab Plain' in India (Ed. R.L. Singh), NGSI, Varanasi, 1971, p. 87.

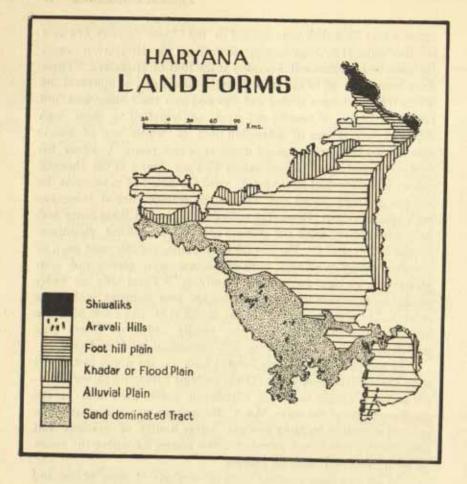
opinion that Shiwaliks were formed in the Upper Tertiary Era as a result of alluvial detritus brought down from the Himalayan ranges by rivers and streams and deposited at the foot of Himalava, "These have been involved in the latest Himalayan systems of upheaval by which they have been folded and elevated into their outermost foot hills. The folding of Siwalik sediments has imparted to them high dips and some degree of induration both of which are of course absent from the recent alluvial deposits of the plain."2 From the geological analysis of the sediments that are found in the Shiwalik ranges it is clear that consequent upon the uplift of mountains the streams got rejuvenated and eroded the granitic core of Himalaya with greater vigour. Hence the sediments found in these outer hills have been derived from the granitic core of the loftiest mountainsystem of the world, "The Siwaliks are made, for the most part, of 'barely coherent sand rock, with occasional clays, gravels and conglomerates, an ideal formation for gullying."3 These hills as badly eroded by monsoon hill torrents pose an area rampant with water erosion. The streams depositing the material at the foot of these hills give birth to piedmont plain, locally called as Ghar. This stretch besides being undulating also consists of sands and gravels.

In contrast to the newly formed hills in the north east of the state the outliers of Aravalis (Delhi System) belonging to very ancient period probably to lower Cuddapah period are found in the southern parts of the state. Much disturbance was caused here due to local mountain building process. Large bodies of granites and amphibolites now found intruded in this system have been the result of local mountain building process.

In the sub-mountaneous tract of Ambala district Morni and Tipra hills are found. In this foot hill zone the hills located in south are lower while northern part constitutes two ridges of much higher hills lying in south east to north west direction with many spurs branching in different directions. These foot hills form a connecting link between the Haryana plain and Himalaya, The higher ridges of Morni and Tipra are separated by Ghaggar valley and form the part of Outer Himalaya. The highest point is reached in Karoh peak (1499 metres) on the Nahan border. The southern slopes of these foot hills have been badly eroded by the fast flowing hill torrents. As a result these hill torrents popularly known as choes in local usage have deposited lot of coarse sand at the foot of these hills,

<sup>2</sup> Wadia, D.N., Geology of India, London, 1939, p. 19.

<sup>3</sup> Spate, O.H.K. and Learmouth, A.T.A., India and Pakistan, London, 1967 p. 535.



In the extreme south of the state Aravali hills are found in the districts of Mahendragarh and Gurgaon. Once lofty mountains the Aravalis have been worn down by water and wind erosion over the centuries. Here in Harvana they are low, isolated and arid hillocks that seldom rise above 600 metres in height above mean sea level. "Besides Gurgaon, elsewhere in Mahendragarh and Bhiwani districts these are scattered rocky outcrops and stand out distinctly against the level horizon above the sandy swelling waves. These rock protuberances are one of the oldest mountain systems of the world, still retaining some relief. These bare, bold, rounded formations present a curiously wind worn topography which illustrates the phenomenon of desert erosion. Equally apparent is the abundance of debris produced by isolation, and the disintegration of the bare surface by desquamation."4 There are few gaps containing depressions in these low detached ranges. These gaps lie in a S.S.W to N.N.E direction and have better water facilities. These gaps also provide easy routes between Delhi-Haryana tract and Rajasthan. The reversal of slope results in a variety of relief features in this region. Intensely eroded in the course of their long geological history the Aravalis now appear as four widely separated rows of isolated hill ranges. The highest among these but showing utter discontinuity is found in the west. The highest point in this series is found (652 metres) in the west of Narnaul town. Second series with a continuity, bit east of the first range terminates at Delhi. In between these two series there are low, broken and detached hills around Rewari and Bawal towns. There are numerous hillocks found in the south and west of Rewari, Such detached hillocks are also found in the northeast of Rewari, north-west of Nuh and eastern part of Firozpur Jhirka tehsil. In the extreme right a narrow range with comparatively higher elevation and continuity is found. As it moves from south to north it undergoes a change in its characteristics. It becomes broken and practically loses its identity in the alluvium of eastern Gurgaon plain.

In between these Aravali ranges there are found some of the gaps the notable among which are Firozpur Jhirka-Nuh gap, Sohna gap; Sahibi gap and Krishnawati-Dohan gap or Narnaul gap. These gaps seem to diverge out from Delhi providing different routes from Delhi to western and central India. Since times immemorial these gaps have been used by caravans and as routes by the invading armies. Later on roads were built through these gaps

<sup>4</sup> Singh, Jashir, An Agricultural Geography of Haryana, Kurukshetra, 1976. p. 40.

and ultimately the railway tracks were laid out through these gaps. The Sahibi gap is prominent among all these gaps. The Rewari Railway Junction is located in this gap. The towns of Narnaul, Nuh and Firozpur Jhirka came up in these gaps to provide facilities of night halts to trade caravans. In the north of Aravalis the tract is traversed by many sand ridges running north-south.

From the above description it is apparent that the Shiwalik ranges render a slope towards south and south-west whereas the Aravalis provide a gradient towards north. But in eastern Gurgaon the area slopes towards south and south-east. North of Delhi. practically throughout, the old high bank of the Yamuna topography forms the summit level of the plain. In the southern part of the plains a band of minimum elevation runs roughly east-west where the alluvial deposits from the Aravalis meet those of the Himalaya. These topographical differences as found in the north and south have given birth to a depression between Delhi ridge and Rohtak sandy ridge which constitutes detached hillocks. The old town of Rohtak (Rohtasgarh) is situated on this ridge. The settlement of the new town of Rohtak on a lower plain itself explains the cause of flood menacing the present town of Rohtak. On the whole about 68 per cent of the total land of the state has gentle slope. Only about 4.6 percent area of the state has comparatively steep slope. This area with steep slope is located in the hills of north east and rocky projections of south. The local relief over the rest of the plain tract is quite insignificant and there only old banks and abandoned courses of the streams provide unevenness "On the whole, the gentle gradient makes movement of surface water sluggish. During the periods of monsoon rainfall soil salts are washed down towards the ground water; in the hot and dry season extensive evaporation takes place resulting in capillary action; on reaching the surface these salt solutions evaporate and the salts crystalise as a white incrustation on the surface looking like a skin disease."5 Such incrustations are known as Kallar and reh. Vast areas with such infestations are found in the low lying areas of Karnal, Kurukshetra, Sonepat, Rohtak and Jind districts. As the state of Punjab consists of Majha, Malwa, and Doah similarly the state of Haryana also consists of three more or less geographic units. These are Kurukshetra, Haryana and Bhattiana.

#### Kurukshetra

The area lying between 28° 30' northern latitude and 30°N. latitude and between 76° 20' eastern and 77° eastern longitudes is Kurukshetra. It mostly consists of the areas of old Karnal district and Jind State. The first account of this region is available in Mahabharata according to which the tract lying between Saraswati and Drishdwati (currently Chautang) rivers has been called Kurukshetra. Including these two streams, this area was drained by nine streams in ancient past. On the banks of these streams there were green forests in which ancient Aryan sages meditated. This area in a way stretches from Ber in the north (the confluence of Saraswati and Ghaggar) to Thanesar and Safidon in south to Ramrai via Sinkh.

## Haryana

The area of the state which mostly lies in between the latitudes of 29° 30' and 30° north is geographically real and proper Harvana, Hansi, Fatehabad, Hissar tehsils and Bhiwani district, parts of Rohtak district and some southern parts of former Jind and Patiala states constitute 'Harvana'. The Yamuna belt in its east, Ghaggar valley in north west, Bagar tract in West, south-west and south, and Kurukshetra in the north form the boundaries of Harvana. With an area of about 5,000 square kilometres the Haryana' resembles a disfigured oval in shape the longer axis of which lies in north-west to south-east direction. Because of the over-whelming population of Jats in this region, it has been called as Jatiat or Jatait.

#### Bhattiana

The ar a lying west of Fatehabad and Bhattu is known as Bhattiana after the name of Bhatti Rajputs (later on most of them embraced Islam) who once dominated the scene here. The composite unit of Bhattiana consists of the area of Ghaggar Valley lying between Fetehabad and Bhatner in Bikaner and the dry area lying to the north west of Ghaggar continuing upto the old course of the Satluj. But in present Haryana only a part of Bhattiana is included which spreads over the Sirsa district and some parts in western Hissar.

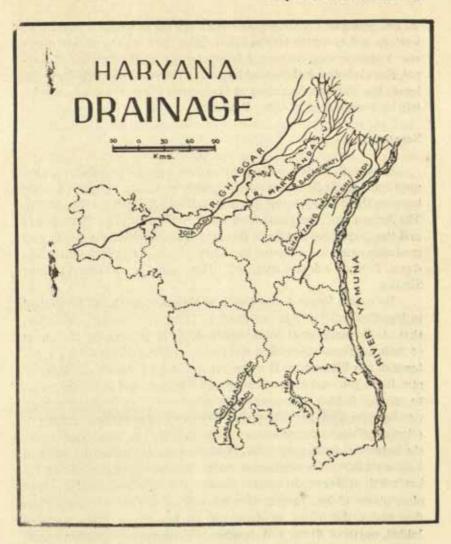
## Drainage

Haryana, as is evidenced from the archaeological finds, old abandoned channels and historical records, was land of many rivers, streams and rivulets and it was because of the existence of these water bodies that Haryana was known as greenery and granary in the past. At present only perennial river flowing not exactly through Haryana but along its eastern border is Yamuna and the state benefits a lot from this stream which is the second sacred stream of Hindus after Ganga. Ghaggar, Markanda, Saraswati, Sahibi, Indori, Rakshi, Dohan and Kasauli are other notable streams of Haryana. These streams are seasonal and look like streaks of water only during summer and very often become formidable bodies of water during rainy season. Since many of the streams have broad sand courses and go below surface this entire tract is a region of inland drainage.

#### Yamuna

In Vedic literature river Yamuna is referred to as Kalindi or Kalind-Kanya. It was named as such because of its source lying in Kalindgiri area lying between the upper courses of Ganga and Satluj. The famous Sanskrit bard Van Bhatt called it Kalindi because of the apparently black water (Kala pani) flowing in it.

The source of Yamuna is the hot water spring located about 13 kilometres west of 20,731 feet (about 6,910 metres) high Bandar Poonchh peak in Tehri-Garhwal It flows there by the side of Jamnotri where hot and cold waters come together. Jamnotri is a pilgrimage centre where people take bath in the pool that forms with the mixing of hot and cold water at the foot of Bandar Poonch peak. Legend goes that Ramayana famed warrior Shri Hanuman after burning Ravana's Lanka flew to this area and dipped his burning tail to extinguish the fire. Bandar Poonchh peak is also called as Kalindgiri. Passing through Shiwaliks the Yamuna touches the boundaries of the old state of Sirmur, now a district of Himachal Pradesh. The Tons meets the Yamuna just south of Kalsi, a constituent of the erstwhile PEPSU, About 20km, south west of this confluence is situated Paonta on the bank of Yamuna. Paonta is the place where tenth Sikh Guru, Gobind Singh had a tactful sojourn against Aurangzeb. He had to fight a couple of bloodiest battles here against the hill rulers who opposed him in his bid to defy the Mughal Emperor. Below Paonta Giri and Asan streams join the Yamuna. From this place the river follows a southern course and works as a boundary between Uttar Pradesh and Haryana. About



20 km. south of Paonta are located Tajewala and Khare wherefrom western and eastern Yamuna canals have been taken out. The western Yamuna canal irrigates a large acreage in the districts of Karnal, Kurukshetra, Rohtak and Hissar. In the south of Delhi Yamuna leaves the Haryana boundary at Hassanpur (Gurgaon) and completely becomes a river of Uttar Pradesh.

#### Saraswati

Saraswati finds a wide mention in Rigveda, Drishdwati is also mentioned in Vedic literature alongwith Saraswati. The *Doab* lying between these two streams has been called *Brahmvarta* by Manu. The Aryans built their first permanent settlements in Brahmvarta and they expanded out from this very tract. Brahmvarta slowly and gradually came to be known as Kurukshetra, Saraswati and Drishdwati flowed independently of other streams flowing in Sapt Sindhu.

Its source lies in a depression at Kalawar, north of Mustafabad in Jagadhri tehsil of Ambala district. This depression receives waters that are drained out of Sirmur-Shiwaliks. It reaches the plain tract of Adh-Badri and thereafter it is lost in sands after traversing a distance of few kilometres. It reappears about 5 km. south of Bhawanipur. It is again lost in sands near Bal-Chhapar and again reappears to proceed further in a south-west direction to reach Pehowa while passing near Pipli and Thanesar. Pehowa is a renowned centre of pilgrimage since ancient times. Near Pehowa the Markanda meets the Saraswati from north-east. Now one stream under the name of Saraswati flows. Its confluence with Ghaggar takes place about 1.5 km, north of Segra. In ancient times the confluence used to take place about 13 km. further to south-west. Now the combined waters flow under the name of Ghaggar stream which flows south of Jakhal, north of Sirsa and reaches Hanumangarh (ancient name Bhatner) and finally loses its existence in sand dominated desert.

Ancient writers when wrote about Saraswati, they talked about the combined waters of Saraswati and Ghagger. "If the possibility of this is granted, the failure in the water supply is easily accounted for by the greater volume of water now drawn off for irrigation and by the silting up of the river beds caused by dams south of Ambala to direct the water over to the fields." It is not possible to believe that the source of water has permanently decreased. Even at present if Ghaggar and its tributaries are left to themselves they will receive the entire drainage of Himalaya lying between Satluj and Yamuna.

This water would be quite sufficient to make this stream perennial for considerable distance. "At the present time, in parts of the course of the various streams every village has dams which, however small individually, carry off in aggregate an enormous volume of water quite sufficient to affect the lower flow of the stream. Nor is this the only result of the system of damming the water for the purpose of irrigation. Not only is the water drawn off, but the flow of water which escapes is impeded. This leads to increased absorption in the soil and increased deposit of the silt and thus, year by year, the power of stream to sweep away obstacles becomes less, while the obstacles themselves become more formidable."7 The bed of this river is well defined only in district Ambala. There is sufficient water for three to four rainy months and it is dry during the rest of the year, water standing only in little pools which have been turned into sacred bathing centres.

## Drishdwati

Once a famous stream in the ancient Vedic and Sanskrit literature it has now completely gone to oblivion. Now it is difficult to say with certainty as to where it flows now and by which names it is known in different parts. Some people feel that Ghaggar itself is Drishdwati while others name Rakshi flowing south-east of Thanesar as Drishdwati, Most of the scholars, however, call the present Chautang as Drishdwati. Drishdwati takes its course in the northwest of Chhachhrauli, a bit south of Saraswati's source. The Chautang is lost in sand near Bal Chhapar but reappears at some distance wherefrom it follows a south-west course in between the Yamuna and Saraswati. The stream meets the western Yamuna canal beyond Taraori, It is said that the old course of Chautang has been converted into one of the branches of western Yamuna canal taken out from Indri. In ancient times the present Chautang, i.e., Drishdwati used to meet Ghaggar a few kilometres south of Bhatner, i.e., present Hanumangarh.

# Ghaggar

Coming out of the Sirmur hills the Ghaggar flows towards north-west. Thereafter it takes a southern trend and then again goes to north-west, South of Kadpur it goes to Chandi in the west, there from goes to south-west and passes through Chhat and Ambala to reach Arnauli, Beyond, Ghaggar follows a south westerly course and meets the Saraswati a bit north of Segra, In ancient times the Ghaggar-Saraswati confluence was about 13 km. south-west of the present one. The old course of Ghaggar can still be traced in the form of a cho west of present course. Nearly 4 km. south of Fatehabad the Ghaggar flows towards Sirsa in the west and therefrom it goes to Bhatner (present Hanumangarh) and is lost in desert. Beyond, Ghaggar is traced in the dry bed of Hakra. "From the appearance of the Ghaggar valley and the numerous remains of towns and villages which stud its banks all the way down to Bhawalpur, it is evident that at one time it conveyed a much larger volume of water than at present and probably was the channel of a perennial stream."

## Markanda

Markanda was known as Aruna in ancient times. Its source lies in the Sirmur-Shiwaliks. Following a south-west course it enters the Ambala district near Kala Amb. In the north of Sherpur village an eastern rivulet Nakti joins the Markanda. Then it reaches Shahbad popularly known as Shahbad Markanda because of its location on the bank of Markanda. Because of heavy floods caused by it along with huge deposits of silt, Markanda distinguishes itself from other streams of Haryana. Beyond Shahbad, Markanda follows a more southerly course and meets the Saraswati nearly 5 km. south of Pehowa. The Markanda-Saraswati confluence is also known as Arun Sangam and the Arun village there reminds till this day the ancient name of this stream, The confluence takes place through Sarusa Jheel there.

Sahibi and Indori are two important streams of Mewat which contrary to the above narrated streams flow from south to north. Sahibi nadi comes out of the Mewat hills near Jitgarh and Manoharpur in Rajasthan. Following Alwar boundary and then crossing Alwar near Shahjahanpur the stream enters Rewari tehsil near Kotqasim. Passing through Pataudi and Jhajjar areas it branches into two rivulets at the village of Kutani in Rohtak and reunites near Sondhi. Traversing through the Delhi Union Territory the United stream falls into Yamuna by way of a channel.

Indori has its source in the Mewat hills near the old fort of Indore. Near the town of Nuh it is divided into two branches. The main branch falls into Sahibi nadi on the southern boundary of Rewari tehsil. The other branch collects waters from many other rivulets and spreads over the plain tract near Bhora, Finally this

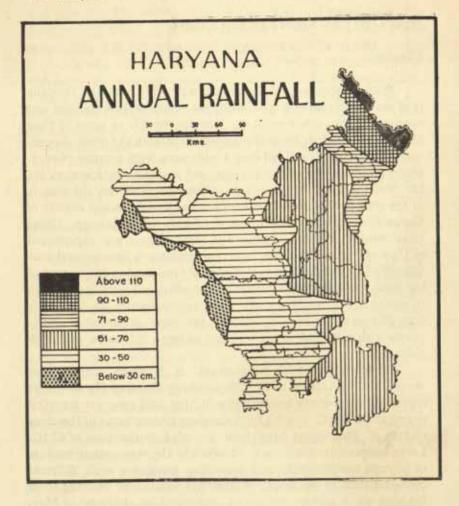
branch also joins Sahibi nadi near Pataudi.

## Climate

With pronounced continental character the climate of Haryana is of semi-arid monsoon type. Being far removed from the seas and nearness to the sub-tropical dry intercontinental air mass of Thar Desert, the state fails to get the full benefit of both the monsoon currents. Deficiency of rainfall over a wide area, high summer temperatures and high rate of evaporation and markedly cold winters are the chief characteristics of climate in Harvana. This way the climate of the state is transitional between the moderately humid climate of Ganga plain and arid desert type of climate of Rajasthan, Usual three seasons of winter, summer and rainy season are experienced in Haryana also. Extremely high temperatures in summer and considerably low temperatures in winter are recorded in major part of the state. Considerable differences in weather not only from season to season but from year to year are observed, which though have been playing havoc with agriculture yet have produced a hardy people with robust physique who can undergo all sorts of hardships.

The average annual temperature in Haryana ranges from about 23 °C in Ambala to 27 °C in southern Haryana. On the entire region highest average temperatures in May and June are recorded round about 40 °C. The highest maximum temperatures in the close vicinity of Thar desert have been recorded to the tune of 47 °C. Large temperature ranges are observed in Harvana mainly because of extreme continentality and prevailing airmasses with different characteristics. In the month of April hot winds start blowing from the west which assume dessicating and scorching character in May. Throughout the months of May and June these hot dry winds keep people indoors for the major part of the day. In local usage this wind is known as loo. The loo lasts till the onset of monsoons. Another unpleasant feature of the climate of Haryana is the duststorms which are very frequent before the break of monsoon rains, Sometimes light showers follow these storms and render much awaited relief. In areas with large deposits of sand nights are pleasant and cool during summers.

Although temperature conditions are more or less uniform in the state but the rainfall conditions widely vary. The amount of total rainfall received decreases from north-east to south and southwest. The maximum amount of rainfall (215 cm.) is received in the sub-mountaneous area whearas minimum rainfall is recorded in the southern and south-western parts (Hissar and Sirsa 18.93 cm.) of



the state. More than 80 per cent of the annual rainfall is received during the rainy months of July, August and September. The Bay of Bengal current of monsoons after striking against the eastern Himalaya are directed by the Ganga valley towards north-western India. As they move away from their marine source the amount of water vapour decreases in them and so is the case with resultant precipitation. By the time these winds reach Haryana they have shed most of their moisture. The moisture is so meagre that only a sufficiently higher uplift can result in good rainfall. Hence the sub-mountaneous areas receive higher amount of rainfall than the plain tract. On the other hand the Arabian sea monsoons are not allowed to rise higher in skies because of the prevalance of an Inter Continental Dry Air (high pressure) mass over Rajasthan. Whenever this air mass recedes temporarily either vertically or horizontally the moisture bearing winds succeed in rising higher and give a good amount of rainfall. Sometimes a copious amount of rainfall is caused during a short period. But it is occasional. The summer rains come in heavy down pours and result in heavy soil erosion besides a rapid run off by way of rivulets and streams. During rainy season though temperatures are not as high as in May-June yet the high humidity sometimes makes the conditions quite uncomfortable and oppressive. The weather preceding a rainfall is particularly exacting. On the whole rainfall over most of Haryana is unreliable, aberrant, meagre and often trauant.

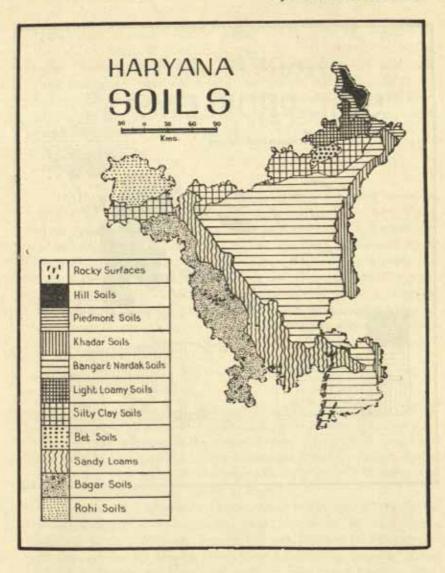
The onset of winters is marked by steadily falling temperatures in the month of October. The average temperatures over the entire region from November to February are blow 20 °C. January is the coldest month when temperature ranges from 10 °C to 14 °C. As a result of cold wave in this month the temperature occasionally falls below freezing point (Hissar, - 3.9°C on January 31, 1929) and the resultant frost damages the crops. "The incidence of frost is particularly important during rabi cropping, though very rarely arresting the growth of standing crops during the months of January and early February. Frosts, are seldom sufficiently severe to damage winter cereal and oil seed crops, but delicate vegetable crops, like potatoes, are destroyed sometimes; fortunately, this happens very rarly,"9 During winter months the temperate cyclones originating in west seas (popularly known as western disturbances) cause a small amount of rainfall which because of prolonged and drizzle from at a time when it is needed most, proves highly beneficial to rabi crops. January is very often the rainiest winter month and Haryana because of its western location in Indian union gets comparatively higher winter rainfall than eastern parts of India. By March the 10 Singh, Jasbir, op. cit., p. 46.

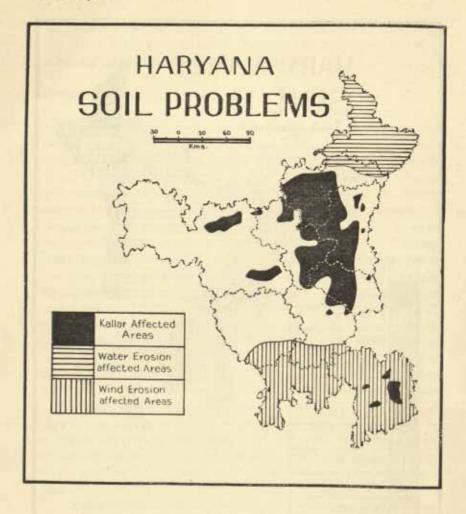
temperatures during day time record a rise of about 5° C though the nights continue to be cool. The rapid rise continues upto May when the nights also become warmer to hot.

#### Soils

The sub-mountaneous area is generally hilly in nature. Soil cover over the hills is very thin. Instead friable beds of unconsolidated sand stone pebbles, conglomerate and clay are found on the slopes of hills. Only strips and terraces of valleys contain alluvial soil covers. Boulders are, however, strewn all over the hills. At the foot of these hills the hill torrents have deposited large deposits of coarse sand and gravel. These sandy and shingly soils are covered with thorny bushes and scrubs. The flood plains of the Yamuna and Ghaggar are known as Khadar in local usage. Khadar tracts are covered with alluvium of recent age and the alluvium brought by these rivers and their tributaries is being continuously deposited every year. This way the alluvial soils are renewed every year which require less of manuring comparatively. These alluvial soils consist of sand and silt. The amount of silt increases in the down courses of the stream while sand dominates in the upper courses. Along the abandoned courses of the Yamuna, Ghaggar, Saraswati and other streams old alluvium is found. The old alluvium is largely calcareous and contains besides sand, clay and silt massive concentration of Kankars at depths of 0.75 1,25 m. These soils are deficient in nitrogen, phosphorus and potash. "In the Nali tracts of Karnal formed by the overflow of the Ghaggar stream the land on either banks has been transformed into hard clay which yields little to the peasant without heavy floods."10

In the southern and south-eastern (bagar) tracts the wind blown sand accumulates in the form of sand dunes. These sand hills at many places are sufficiently long and high. The shifting sand dunes are interrupted by firmer and loamy bottoms at some places. The exceptions are called tals in local language and are useful for cultivation. Originating from desert quartz these soils consist of sand grains and have a low moisture retaining capacity. A high content of salt is found in these soils. Hence these suit the cultivation of inferior and coarse grains. Wherever the soils are dominated by sandy loams they become moisture retaining soils and favourably react to dry farming methods. Such soils found in Fatehabad, Hissar, Bhawani Khera and Bhiwani tracts have started yielding good results on being irrigated. In the district of Sirsa a tract of reddish





loam known as Rohi, locally is found to the west of bagar. The Rohi soils consist of ideal proportions of clay, silt and sand but suffer from seepage. However, with the application of irrigation these soils give higher yields of crops. On the whole without artificial use of water in this area with scanty rainfall these sandy soils deficient in nitrogen, phosphorus and potassium are as arid and unproductive as in the Thar desert.

#### Ground Water

In the Shiwaliks of Haryana the ground water table is quite deep. Over the rest of the region the ground water table rises as one moves from south and south-west to north and east. In the districts of Mahendragarh, Bhiwani, Hissar, Jind and Sirsa the sub-soil water is deep seated and is generally found at a depth of more than ten metres except in the Hansi depression and Ghaggar bed. The greatest depths range 40 to 50 m. In the districts of Ambala, Karnal, Kurukshetra, Sonepat and Rohtak the water table is often found at an average depth of 3 m. though it never exceeds a depth of nine metres.

### Fauna and Flora

The flora in the plain tract of Harvana resembles that of the sand parched dry areas of Middle East. In the submountaneous area lying in the north-east of the state, Tropical Forests and Northern Tropical Thorny Dry Deciduous forests are found in mixed form. In this belt pine especially the 'lower Shiwalik pine' is found mixed with scrubs and thorny species of trees.

The natural vegetation over plain tract is Tropical Thorn Forest in areas getting annual rainfall from 20 cm to 40 cm. In areas where rainfall sufficiently exceeds 40 cm Tropical Dry Deciduous Forests are found. Among Dry Tropical Deciduous Forests. Kikar (Acacia Arabica) dominates in northern parts, and Shisham (Dalbera Latifolia) dominates in southern parts. The shrub jungle mainly consists of coral flowered leafless Karir (caper) and Jal Jund. In Dry Thorn Forests short stunted thorny bushes with occasional kikar and babul trees are found. The Aravali hill tract in the south is mostly without much vegetation. A few stunted trees and shrubs are seen on the hills while in rainy season grass springs up which turns pale, grey and dry in the dry season.

Only 3.4 per cent of the total area of Haryana is under forests, of which state forests represent about 1.7 per cent, In accordance with the National Forest Policy the plain area in Haryana should have 20 per cent and hilly area 60 per cent of its total area under forests. The government are doing their utmost to increase their meagre forest resources. Economic plantations are being raised along railway tracks, roads and canals. Quick growing species like Eucalyptus, Shisham and Kikar are being given preference to other species. Similarly the Forest Department is creating and maintaining a Green Belt along Rajasthan border to check the onward march of the desert, which given a free play increases at the rate of .8 km. every year. Besides checking the problem of soil erosion the scheme would augment the supply of timber, fuel wood and other products of economic value.

The ancient literature, historical record, etc., prove that Haryana was covered with vast dense and green forests in the past. These forests were abounded with wild life too. There is mention of deers, ducks, doves, pigeons, partridges and of ferocious animals like lions and panthers living in those forests of Haryana. The consequent prevalance of aridity and long human occupance in this tract resulted in a poor vegetal cover in Harvana. With descreasing forest acreage the wild life fell prey to the vagaries of weather and man. Today very few wild animals are found in the forests of Haryana, But now the state authorities have initiated a plan to preserve wild life in Harvana. Within 13 km. of 'Sultanpur Bird Sanctuary' the area has been closed for all shooting purposes. The 'Mini Zoo' at Pinjore and 'Deer Park' at Hissar are being maintained and further developed. Ducks are being maintained in the Chakravarty lake at Karnal. A Deer park at Kurukshetra is also being planned.

#### Mineral Resources

With the exception of Mahendragarh, Gurgaon districts and a narrow belt along the north-western border of Ambala, the state is very poor in minerals. Iron ore of average quality is found (Reserves 6 lakh tons) in Aravali area of Narnaul. Lime stone, Kankar, marble are other mineral deposits of Mahendragarh. Slate also occurs in the Mahendragarh district. Because of its desirable flat cleavage nature, the slate mined here is used for various purposes. Deposits of China clay have been located in Gurgaon district. In Ambala district good quality limestone is mined which is used in the Bhupindra Cement Works at Surajpur. But the deposits at present located are sufficient for about a decade only. In various occurrences the Malla deposits are the largest in Ambala. The Kankar is being worked out in Lahrwara (Bhiwani)

and Kaliawa (Rohtak) for cement manufacturing at Charkhi-Dadri in Bhiwani district.

District Mahendragarh is the richest district as faras the mineral deposits are concerned. The geological survey has revealed that deposits of asbestos, calcite, copper ore, kaynite, manganese ore, mica and vermiculite are other deposits found in the district, But by and large the deposits are small as well as of low quality.

# Irrigation and Power

Haryana is an agriculture dominated state of India. But a successful agriculture in a state like Haryana with its peculiar problems without artificial application of water is not possible. About 5.5 lakhs hectare land of the state bordering with Rajasthan is almost completely arid. The rainfall in this desert-like area is irregular and uncertain both in time and space. Most of the meagre amount of precipitation is lost by evaporation caused by high temperatures and absorption by sandy surface. The result of these vagaries has been severe droughts and famines almost every alternate year. This area contains either negligible amounts of ground water or exceedingly brackish water. Some places have brackish as well as lesser amount of ground water avilable at very deep levels. Absence of natural vegetation as a result of arid climate, high temperatures and stormy winds lead to soil erosion at a mass scale. At the height of all this in the lack of natural grips the shifting sand dunes aggravate the situation, Above all the Aravali tract in this zone with adverse slopes puts serious hurdles in the way of implementing normal means of irrigation.

With the exception of Yamuna, which also flows along its eastern boundary, Haryana has no perennial streams. The seasonal

streams that have no water at the most needed time, play havoc during rainy season by way of their flooding nature. In the northern part of the province the hill torrents (choes) besides causing a serious problem of soil erosion, deposit coarser sand and gravel and thereby cause another hurdle in the way of successful farming. There are no water bodies in the form of huge lakes out of which water canals can be taken out to water farms and field. This type of physical environment stands a serious hurdle in the way of providing normal irrigation facilities and requires extraordinary methods towards which the new state of Haryana gave a serious thought and execution.

Canals had been built in Haryana tract much before the British regime also but they served a limited area. The Ghaggar branch of Sarhind canal watered parts of Hissar district. The most important canal was, however, the Western Yamuna Canal, The Afghan Sultan Feroze Shah Tughlaq had to get this canal excavated in A.D. 1356 to fetch water to his newly built strategic fort town of Feroze-i-Hissar. "It is, however, uncertain whether Feroz Shah's canal derived its water supply from the Yamuna or from the Chautang nadi."1 This canal was renovated and improved upon by another Afghan ruler Sher Shah Suri. At that time the canal had two main branches of Sirsa and Hansi, It was the Mughal emperor Shah Jahan the lover of buildings and gardens, who got the Delhi branch excavated to bring water to his Shahjahanabad to maintain its greenery. Thereafter the canal has remained in disuse for a considerably long till it was reopened by the British in A.D. 1873.

The western Yamuna Canal takes its water from river Yamuna from the headworks at Tajewala. The total length of this canal including its branches is 3,226 km. This waters about 4,80,000 hectares of land in Patiala (Punjab), Ambala, Karnal, Rohtak, Hissar and Sirsa (Haryana) districts along with some tracts in Delhi and Rajasthan. Sirsa branch that takes off at Indri is the largest branch of this canal system. This branch which irrigated about 81 thousand hectares of cultivable land in its initial stages started irrigating 1.2 lakh hectares by the end of Second Five Year Plan after remodelling and extension. The entire area in the Sirsa branch and some other tracts were transferred to Bhakra system after the completion of this multipurpose project. On the other hand Bhalaut and Sunder sub-branches were provided water from 256 tube wells of the Jagadhri tube well scheme.

Before the formation of this new state the work on Gurgaon Canal from the Okhla barrage (Delhi) at Yamuna river had been started. Because of Chinese aggression the work had to be suspended and was resumed in May 1964. On 17 June 1967 the Canal was opened on experimental basis and it was also fed on the waters (200 cusecs) taken from Agra canal. This canal continuously flowed till April 1968. But Uttar Pradesh was unable to afford the supply of water any more for this canal till the completion of Okhla barrage. On 11 September 1972 in an inter-state conference it was decided to erect a new Okhla barrage to supply water continuously to this canal. This scheme is now nearing final stages. About 80 per cent of the work on this scheme has been completed but some minors and feeders have yet to be completed. The area irrigated by this canal system has been increased from 145 hectares (1967-68) to 15.313 hectares in 1974-75. On completion this canal system would irrigate about 3,2 lakh hactares of land in the Palwal, Nuh, Ballabgarh and Gurgaon tehsils of Haryana. The canal would run with full supply discharge as soon as the new Okhla barrage is completed and Harvana gets its share in the Ravi-Beas waters.

#### New Bold Ventures

As already explained the chronic shortage of perennial streams and reversal of slopes over a large tract required new and bold ventures to mitigate extensive suffering and misery caused to people because of frequent droughts. The authorities decided to have an assessment of the water resources of the state and utilise the same in the most effective and economic way. As a result of these efforts 'Lift irrigation' received top priority in the long drought affected as well as high altitude areas of Mahendragarh, Bhiwani, Hissar and Sirsa districts.

# Jui Lift Irrigation Scheme

This scheme was taken in hand in November 1973. The entire work of constructing more than 160 km, of canal length and seven pumping stations to fetch flood water from Yamuna was completed within ten months. On trial an area of 175 hectares was irrigated in the Kharif crop of 1970. With the commissioning of Augmentation Canal in January 1973 the Canal has become almost perennial. By the end of 1974-75 an area of 5,873 hectares was put to irrigation by this scheme. There is demand for additional minors and distributaries (as the area is sandy and undulating and the conventional 3.2 km, long water courses do not serve the area adequately) for which extension project is fast approaching completion.

## Loharu Lift Irrigation Scheme

The work on this irrigation scheme was taken up in 1970. The 96 km. long canal known as Indira Gandhi Canal was commissioned on 28 July 1971. Four pumps have been installed on this canal, By July 1972 eight new pumps and 128 km, canal length was added to this system. These first and second stages of this project shall ultimately provide irrigation facilities to 1,33,000 hectares chronically drought affected land in Bhiwani district. For kharif irrigation the system will utilise the surplus waters of river Yamuna going waste below Tajewala headworks and flood waters of Drain No.8. When Haryana gets its share in the Ravi-Beas waters, the scheme would become perennial. The scheme is nearing completion and also picking up the area to be irrigated. The acreage of irrigated land has increased from 5,374 hectares (1972-73) to 9,931 hectares (1974-75). Keeping in view a consistent demad for additional minors and subminors the work on such distributaries has also been taken up.

## Siwani Lift Irrigation Scheme

The work on Birendra Narayan Chakravarti canal system of Siwani lift irrigation scheme was started in September 1971. A 216 km. long canal with four pumping sets was commissioned in July 1972. This project too is fast progressing towards completion and would ultimately provide water to 97,000 hectares drought prone area of Bhiwani district. This system would also use the surplus waters of river Yamuna for kharif irrigation till it becomes perennial on the availability of Ravi-Beas waters. The irrigated acreage under this scheme has increased from 1,409 hectares (1972-73) to 6,235 hectares during 1974-75.

All the three above cited projects would become perennial on the completion of Ravi-Yamuna link. Ravi has already been linked with Beas by way of a canal. The work on Beas Satluj link is nearing completion and is expected to be accomplished by the end of 1977. A 209 km, link canal joining Satluj with Yamuna would pour 3.5 million acre feet water in Yamuna river. About 106 km. length of this link canal would fall in Punjab. On completion of this link canal the three lift irrigation schemes would irrigate the maximum of area and would result in the production of additional agricultural products of the value of Rs. 17.62 crore annually.

## Nehru Lift Irrigation Scheme

The biggest lift irrigation scheme of the state known as "Pandit Jawaharlal Nehru Lift Irrigation Scheme" has been investigated and formulated. Jhajjar Lift Irrigation Scheme is a part of this bigger project. The latter scheme was initiated in October 1972 and commissioned in July 1973. The Jhajjar lift irrigation canal irrigated about 1,645 hectares of land on trial basis in 1973-74. The system gets surplus water from the Yamuna for kharif crops only. This would also become perennial only when Ravi-Beas waters reach the Yamuna. The work on the main project was also started during 1974-75 and is likely to be completed during Fifth Plan. On its completion, with full irrigation capacity the Nehru Lift irrigation project would help in the additional agricultural production worth Rs. 18.36 crores in the districts of Rohtak, Mahendragarh and Bhiwani.

On 16 August 1975 Sanga Lift Irrigation Scheme about 10 km. from Bhiwani was inaugurated by the Haryana Chief Minister. This eleven-lakh rupee scheme will irrigate about 3000, acres of land in the ten surrounding villages.

## **Augmentation Canal Project**

The Augmentation Canal Project was taken in hand in November 1971 with a purpose of increasing water supply in the channels of western Yamuna Canal. The project was commissiond in January 1973. Augmentation of water supplies has been achieved through a battery of 168 deep tubewells (130-230 m.) with a discharge capacity of 3 to 7 cusecs of water along and across the new lined channel between Jagadhri and Munak. Besides eliminating the loss (470 cusecs) by absorption the scheme enables the induction of 500 cusecs of water in western Yamuna Canal.

#### Parallel Delhi Branch

Parallel Delhi Branch has been completed. It is a 47 km. long lined canal. This canal will help in the elimination of loss of 200 cusecs of water by way of absorption. This gain would augment the water supplies in western Yamuna Canal which will be utilised to produce additional farm products worth Rs. 2 crores per annum.

#### Munak Canal

Munak Canal has been constructed to increase the water supply

in order to feed the lift irrigation scheme. This 8 km, long canal takes off from the tail of Augmentation Canal and runs parallel to the western Yamuna Canal's main branch and meets it at Munak Regulator. In the first phase the unlined canal increased the water carrying capacity by 4,500 cusecs but ultimately on being lined it will raise the capacity to 8,000 cusecs. At present it is being used to carry the surplus flood waters of western Yamuna Canal during rainy months but when Harvana gets its share of Ravi-Beas waters, the Munak canal will be utilised to carry those waters.

#### Barwala Link Canal

About 30 km. long Barwala link canal was constructed in June 1972. With a capacity of 1,725 cusecs this link canal pours waters of the Bhakra Main Line Canal in the Sirsa branch of western Yamuna Canal. With the commissioning of this canal, corresponding capacity has been released in Narwana Branch for utilisation.

## Remodelling and Lining of Canals

In order to increase the carrying capacity of different canals and also to save the water wastage from seepage the courses of canals are being deepened as well as lined. Lining work is in progress on Hansi branch, Delhi branch, The Delhi Tail Distributory, Bhalaut Sub branch and Sunder sub-branch. In order to save land and reduce the cost the old practice of building parallel canals has been suspended. Instead the existing canals are being lined with pre-cast cement concrete blocks in the rotational closures. For the first time polythene lining has been experimented in the head reaches of Sunder sub branch. Polythene lining besides being cheaper also spares the use of bricks and cement so scarce and so badly needed for other constructions.

#### Flood Control

The state has rightly realised that by way of controlling floods caused by torrential rains the agriculture of the province would be doubly benefited. Flood control measures would not only check soil erosion and damage to crops but would also result in the storage of water to be utilised at later stage for irrigating the fields. Under the 'Minor Irrigation Schemes' and 'Desert Develoment Programmes' many bunds have been constructed in the districts of Gurgaon and Mahendragarh to eheck soil erosion and provide basin irrigation. To store the flood water of Markanda stream during rainy

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season the storing capacity of Bibipur Lake is being increased from 17,000 acres to 50,000 acres. The existing Bibipur and Thanesar bunds are being strengthened on priority basis. Work on the Lukhi bund is also being speeded up. Schemes for utilising the flood waters of Ghaggar and Markanda in Ambala districts and that of Sahibi nadi in the districts of Gurgaon and Mahendragarh are receiving serious attention of the planners.

Work on the first stage of Landoha Moderation Scheme, i.e., Kotla Lake has been accomplished. The stagnating water of Kotla drain over about 15 square km, area has been pumped out and the land has been made fit for cultivation. Arrangements for depleting the flood waters entering lake during rainy season have also been made. On the reclaimed land wheat worth Rs. 40 lakh is being raised every year now.

As a result of building new canals and improving upon the existing ones the net area irrigated by canals has increased from 13.73 hectares (1967 68) to 15.54 lakh hectares in the year 1973-74.

# **Tube-Well Irrigation**

Haryana has very limited flow waters and most of its area has saline brackish water. Vide estimates carried out in the end of 1968 it was found that only 3,000 square km. area out of about 44,000 square km. geographic area (about 6.5 per cent) of the State had non-saline water. With a purpose to have detailed surveys carried out by the cell it has been established that an area of about 16,000 sq. km (about 36 per cent) contains non brackish waters for irrigation; but in deep acquifers. These areas include the arid zones of Haryana adjacent to Rajasthan such as Tohana-Fatehabad-Sirsa Belt (Hissarand Sirsa districts), Behl-Bhdhera-Loharu-Shampur-Satnali belt (Bhiwani and Mahendragarh districts), Krishnawati-Sahibi Nadi belts (Mahendragarh and Gurgaon districts) and areas of Ambala district where irrigation by way of river canals is not possible.

Under the guidance of a best ground water exploration unit in India, the Minor Irrigation (Tubewells) Corporation Limited of Haryana has launched a crash programme of drilling deep tubewells in the suitable areas. By this time about 1,200 augmentation tubewells and about 1,400 direct tubewells have successfully been drilled in the state. A special feature of the corporation is that it is making conjuctive use of surface and groundwater flow, by drilling deep high capacity tubewells in areas having abondoned non-brackish water to augment canal supplies so as to feed the arid and saline zones of the province. The Corporation has developed its own capacity of drilling 500 to 600 deep tubewells per annum.

Prior to the formation of this corporation people watered their fields by way of wells in areas where canal irrigation is not possible. In the year 1970-71 about 574 thousand hectares of land was irrigated by way of wells. Since then the acreage being irrigated by wells is on the decline. In the year 1973-74 only 95 thousand hectares of cultivable land got irrigation facilities by way of wells. On the other hand the area irrigated by tubewells was almost neigligible in the state upto 1970-71. In the year 1971-72 tubewells irrigated about 537 thousand hectares of land and it rose to 624 thousand hectares in 1973-74. The number of tubewells and pumping sets which stood at 33 thousands in 1966 has risen to 201 thousands in 1976. The tubewells have also made the tank irrigation in Haryana almost defunct. In the year 1973-74 the acreage under tank irrigation was almost negligible whearas in the preceding year it was 5,000 hectares and about 17,000 hectares in 1969-70.

The net result of the sustained efforts of the state in the field of irrigation is that today about 49 per cent of the net area sown is irrigated whearas in 1960-61 only 29.6 per cent of the net area sown received irrigation facilities. District of Kurukshetra tops in this respect. About 79.1 per cent of its net area sown gets irrigation facilities with Karnal (71.1 per cent) in the second place. The district of Mahendragarh has the poorest irrigation facilities so far with only 19.2 per cent of its net area sown under irrigation. As compared to the neighbouring state of Punjab where about 72 per cent of the net area sown gets irrigation facilities the state of Haryana has yet to take long strides. But viewing the fact of absence of perennial streams and presence of brackish ground water the efforts made by Haryana are worthy of praise and emulation. Compared to the all India figure (22.17 per cent) the position of Haryana is quite comfortable and the new state of Haryana surpasses much in this field the States like Madhya Pradesh (8.06 per cent), Maharasthra (7.80 per cent), Karnataka (11.09 per cent), Rajasthan (14.05 per cent), Gujarat (12.82 per cent). Harvana is surpassed only by Punjab state in this respect.

# Power Development

To give a boost to agricultural as well as industrial production as also to achieve modernity and technological development power is an essential pre-requisite. Haryana was the first state to provide electric link in all its towns and villages and she was followed in this venture by its neighbouring state of Punjab which took about six more years to achieve this aim. It was a wonderful achievement when viewed in the context of 'Ootacummand Conference'

where state power ministers decided to electrify half of the rural areas by the year 1980. Haryana achieved the target of complete electrification on 19 November 1970. At the time of its birth the state of Haryana had barley 18,663 circuit km. of transmission and distributary lines which took power connections to 1,312 towns and villages. By 1970 about 53,634 km lines took power to all the 6733 villages, and towns of the state. In 1966 only 1251 villages had been electrified in the State. By this time the length of transmission lines taking power to individual consumers has touched the figure of one lakh circuit km. The number of consumers which stood at 5,43,695 in 1967-68 has reached 10 lakh figure by now. The per capita power consumption has also increased from 58 units in 1967-68 to 132 units in 1973-74. Taking sectoral consumption of power the agricultural tubewells alone consume about 45 per cent of total power and this is the highest in our country. If the consumption of electricity is the barometer to measure the progress of a nation or state, then it can be safely said that Haryana is taking long strides on the path of over all progress and development. The way of life of Haryanvi farmers in the contryside is changing, Besides using electric threshers, flour mills, rice husking machines, cotton ginning machines, sawing mills, oil-seed crushers, fodder cutting machines they are increasingly taking to the use of electric fans, irons, radios, stoves etc. The children in the countryside are increasingly discarding the kerosene lamps and are now solving their sums in electric light. The artisans like blacksmiths, carpenters, silversmiths and alike are using power now to run their wheels and furnaces in many villages of the state.

Haryana which has no perennial river flowing across its land is deprived of the multipurpose projects like Bhakra-Nangal or Damodar Valley schemes. But Haryana has its share in the Bhakra project wherease the Beas multipurpose project is a joint venture of three states including Haryana. But so far inspite of its best efforts the state is not self sufficient in the field of power generation. She has to buy power from Delhi and Rajasthan. Though at present the state has yet to devise ways of generating hydropower within its own frontiers as she carved out a net of canals based on lift irrigation technique, yet the state is doing its utmost to generate thermal power on its own surface. The first unit of the Faridabad thermal plant with 60 MW capacity was commissioned in 1974 which augmented the state's earlier generating capacity of 232 MW. Another unit with the similar capacity has been commissioned only few months ago. Both these units provide about 20 lakh units of power daily. Badarpur (Delhi) Thermal Project, a joint venture of Delhi and Haryana has also started injecting

power to Haryana grid system. One more major Thermal power project with two sets of 110 MW each has been taken up at Panipat. One unit is expected to be completed within next couple of years.

Western Yamuna Hydel Scheme has also been planned and drafted. The venture is likely to cost the state exchequer about Rs. 13 crores. About 20 km. long hydel channel (similar to the Nangal hydel channel) is proposed to be built from the Tajewala headworks. Three power houses with a generating capacity of 45 MW would be installed along this channel. Haryana will also get water power from Beas Project, Similarly on completion of central projects of Salal and Baira and Baira Siul, Haryana will get water power, When the Rajasthan Atomatic Power Project (Rana Partap Atomic Power Project) is completed Haryana will get atomic power also. The completion of Beas Satluj link and consequent firming up of Bhakra power system would further add the current in the Haryana grid. In the field of power generation inspite of its inherent inability to produce hydropower Haryana has made wonderful achievements in producing thermal power. When the shares of joint ventures are proportionately divided it was found in the year 1972-73 that Haryana produced 1992 million KW of power as against 2007 million KW generated by Punjab. The position of Harvana in that year was far more comfortable than the states with rich potential of water power, e. g., Nagaland (Im KWh) Tripura (6m KWh), Manipur (13m KWh), Himachal Pradesh (171m KWh), Jammu and Kashmir (242m KWh) and Assam (482m KWh).

4

# Agriculture and Live-stock

Many scholars find the roots of word 'Haryana' in 'Hara', i. e., green, implying thereby that once a granary the 'Harvana tract' depicted the picture of greenery all around. That might have been true centuries before the inception of 'Haryana' as a new state of the Indian Union. At the time of its formation the Haryana state presented a very grim picture. Not to speak of greenery all around but even life giving water was a rarity in a large tract covering about 5 lakh hectares, inhabited by about two million people, where cruel nature used with wanton ferocity its teeth, nails, claws and firsts. "In periods of drought and famine, which recurred with unerring regularily, perished at the hands of Kismet not only thousands of cattle and other animals but also men, women and children of all ages and all strata of society. When rains failed, the walled wells, known as kunds, became stone dry, ponds turned into pools of sand, and people moved from place to place in the vain hope of coming across somewhere reservoir of water. The leaves and branches of acacia provided the only nutrient to a hard pressed population."1 What an irony, wherever water occured in deep wells the occupants of those wells guarded the water bodies day and night so that starving and thirsty roaming swarms of humanity may not intrude. The sight on these wells sometimes presented heart throbbing and pathetic picture. In this land of historic hospitality thirsty were refused water but children below the age of twelve were lucky as they could get water from the God fearing guards on compassionate grounds. At such chivalarous but discriminating occasions many men and women had envied their young ones and vainfully wished it to be their privilege if they had never crossed twelve. As late as the year 1972 in the village of Leela (Loharu) a well was locked throughout the year as reserved for school going children only.

Till recently the agriculture of Haryana was marked by the contrasts of pastoral activity in south-west and persistently subsistence farming elsewhere. Today one wonders when he no more listens awful tales of devastation on mass scale of life and property. The leaders, planners and people moved with a dogged determination to avert the vagaries of nature, tame the age old ruling nature and cut short the legacy of miseries. The enlightened few took a vow to wage a multipronged war on traditional modes, habits diving deep in backwardness. They wanted to awaken the tillers of the soil from slumber, laziness and inertia so that they could throw the evil of poverty, lock, stock and barrel from their midst and claim themselves as the masters of their destiny. On the advice of forward looking engineer Shri Krishan Swaroop Pathak the state launched 'Lift Irrigation' schemes in Haryana. At a late stage Shri Pathak was joined by two other indefatigable engineers in the person of Shri Ishwar Chand Gupta and Shri Arjun Datt Chowdhry. The lnitial successes were so glorious that by this time the lift irrigation device seems to have been spreading its net in all the drought prone and undulating areas. Groundwater reservoirs are being exploited to maximum. Haryana Agricultural University, Hissar has been producing new high yielding seeds. Haryana has already become the leader of 'Agricultural Implements Industry' in India. New tools and scientific methods of cultivation are being increasingly used. Insecticides are being properly and timely used. The onward march of desert sands is being effectively checked. Farmers are being constantly taught about new methods, devices and techniques. The toiling tillers are being saved from the clutches of unscruplous traders and money lenders. Optimum use of cow dung, night soil and chemical fertilizers is being made. The use of fertilizers has registered an increase from 1.62 lakh tonnes (1966) to 6.00 lakh tonnes in 1976. Soils are tested in soil testing laboratories and farmers are guided to use particular manures to overcome the deficiencies,

Soil erosion, soil exhaustion and soil salinity are being curbed with sustained efforts. All these efforts have brought fruitful results in a short span of period.

According to the 1971 census 82 33 per cent of the population of Haryana derives its sustenance directly from agriculture. Such a heavy pressure on soil is likely to impede agricultural development but Haryana has belied this belief. This figure is much higher than the national figure of 69.5 percent. This implies that the steps taken by Haryana in the field of agriculture are worthy of emulation by other Indian states, especially when the state had to create the entire infrastructure anew. Harvana with 1.44 per cent geographical area of India contributes 5 per cent to the agricultural production of our country at present. About 60 per cent of Harvana's income is derived from its agriculture and agriculture provides sinews to the industry of Haryana in the form of raw materials. So green is the contryside today that the verdure of Haryana never assumed such dimensions probably in the recorded history. The Haryana tract which resounded with battle cries and freedom struggles many times during medieval times and British domination, today reverbrates with the echoes of tubewells, whirring modern iron ploughs, soot pouring tractors and pleasing noise of threshers, combine harvesters and other mechanical appliances. "The sandy tracts of Hissar where the hoards of the blackbucks spanned with grace and rythm unparalleled in nature are today growing grapes and American cotton. The basmati rice has found its natural habitat in Karnal and Kurukshetra districts and the Maxican strains of wheat have swept the entire length and breadth of these ancient plains,"2

Inspite of the long strides taken in the field of agriculture one does not find farming being practised on commercial basis. Agriculture is still regarded more as a way of life by the fasmers. More emphasis is laid on food and fodder crops whereas cash crops so far receive scanty attention. "Inspite of the recent agricultural upheavals in an organized form during the Five Year Plans, the agriculture throughout most of Haryana is still essentially tradition-oriented in the use of land for food crops, in the use of food crops for man and cattle and even, to a considerable degree, in the methods of scratching and culturing the soil." Wheat, gram, barley and pulses are the major Rabi crops and paddy, jowar, maize, bajra, some other pulses are the kharif crops of the

<sup>2</sup> Haryana-1975, Government Publications, p. 5.

<sup>3</sup> Singh. Jasbir. An Agricultural Geography of Haryana. Kurukshetra. 1976. p. 1.

State. Moreover sugarcane, cotton and oilseeds are the important cash crops of Haryana, Till late beginning has been made in the field of horticulture and vegetable farming.

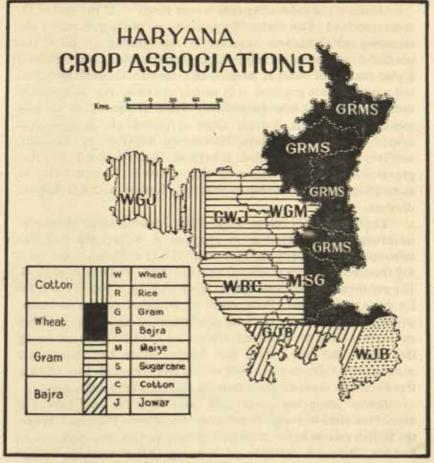
Wheat is the most important of all the crops grown in Haryana. Widely distributred in the state wheat occupies a quarter (24.52 per cent) of the total harvested area. Adapted to moderate temperature under semi-arid conditions wheat can be cultivated on a variety of soils with relatively low rainfall. Wheat is generally grown in Haryana on clayey and sandy loam soils in irrigated areas. Karnal, Kurukshetra, eastern Sonepat, north-western Rohtak, northern and north-eastern Gurgaon are the major wheat growing areas of Haryana. In this zone about 35 per cent of the total crop land is devoted to wheat culture. The intensity of wheat farming decreases towards west and south-west where aridity in the atmosphere and sand content in soil predominates. Western Bhiwani and north central Mahendragarh grow less wheat. The acreage under wheat increased from 7,43 lakh hectares (1966-67) to 11.77 lakh hectares in 1973-74. Similarly, the production of wheat rose from 10.53 lakh tonnes (1966-67) to 18.11 lakh tonnes in 1973-74 and 19.56 lakh tonnes in 1976. The per hectare yield also registered an upward trend from 1,425 kg, per hectare (1966-67) to 1,539 kg, in 1973-74. Since then the total production and yield of wheat in the state is steadily increasing. The state has procured about one million tonnes of wheat during the year 1976.

Rice (paddy) occupying about 6 per cent of the total cropland of the state is a minor crop in relation to wheat farming in Haryana, Haryana produced 5.4 lakh tonnes of rice (1975-76) from an area of 2.92 lakh hectares, as against 2.23 lakh tonnes (1966-67) on a total area of 1.92 lakh hectares. The per hectare yield of rice has risen from 1,161 kg. in 1966-67 to 1,851 kg. in 1973-74. This means that the rise in rice production has mainly been achieved through higher per hectare yields which are steadily rising as a result of the application of improved varieties of paddy seeds, fertilisers, pesticides and new farming techniques. The area reclaimed from alkaline and saline soils is being put to rice cultivation and this is likely to boost the rice production in Haryana. Rice culture is mainly limited by temperature and water availability, requiring high temperatures (about 23.75°C) and sufficient amount of assured water supplies during its period of growth. So much so that for about 2.5 months the crop must remain standing in about 2.5 cm. deep water. About 125 to 150 cm. of rainfall during the growing season is a minimum requirement. Since like the entire country rainfall conditions are quite uncertain, paddy is mainly grown in areas receiving tube-well irrigation, which is more assured a device

of irrigation than the canals which depend upon the amount of rainfall in the catchment areas of their parent streams. Moreover this crop is raised in areas with heavy, compact and acidic soils capable of holding water over their surface for a considerable period. North eastern and central parts of the state consisting of Thanesar, southern Guhla, northern Kaithal, Karnal (excluding Yamuna flood plain) and northern Sonepat are known as the rice bowl of Harvana where 20 to 50 per cent of the cropland is given to rice cultivation. Even in the days of composite Punjab Karnal district (now Karnal and Kurukshetra) had the highest acreage (26 per cent of its total harvested land) under rice culture. Requiring exacting labour and skill the crop has been raised mainly in wetter parts of the state and is now extending to alkaline and water logged areas otherwise useless tracts. It is a very surprising fact that rice in this zone is raised almost entirely for export as the area is inhabited by wheat eaters.

Jowar a millet crop of Haryana is a food as well as fodder crop in some parts of the state. Jowar is grown everywhere in the province except in the districts of Sirsa, Hissar, Bhiwani, Kurukshetra and Ambala, Jowar though can be successfully grown in areas with high rainfall it is replaced by maize (corn) a much more useful crop. The basic characteristic of Jowar is that it can be a dormant crop during dry spells but regains its growth at a fast rate when favourable climatic conditions occur. It is grown in those parts of the state where climate is too dry for maize. It is grown on soils with light sands and heavy clay contents in areas. with an annual rainfall of 50 to 70 cms. About 3.5 per cent of the total cultivated area of the state is under this crop and mostly in the districts of Gurgaon, Jind and Rohtak. Heavy concentration of this crop is, however, found in southern Nuh, western Ballabgarh, Palwal, eastern Firozpur Jhirka (Gurgaon), Jhajjar, (Rohtak), Rohtak, Narwana, Jind, Safidon (Jind), Gohana, southwest Sonepat (Sonepat), southern Hansi (Hissar) and Bawani Khera (Bhiwani) tracts.

With the extension and expanion of irrigation in Haryana the Jowar acreage is steadily falling. The acreage under this crop declined from 2.7 lakh hectares (1966-67) to 1.86 lakh hectares in 1973-74. The overall production of this grain however, grew from 49 thousand tonnes (1966-67) to 55 thousand tonnes (1973-74) because of an increase in the per hectare yield which rose from 181 kg. to 296 kg, during this period. It is expected that the acreag under this crop would fall still further but production would be maintained between 5 to 6 lakh tonnes to feed the animals which are gradually assuming more importance these days.



Note: The dotted area shows the dominance of Barley

Maize a soil exhausting crop covers about 2.25 per cent of the total crop land of the state. The processes of weeding, thinking and manuring are also labour exacting in the farming of corn. For successful cultivation of maize high temperatures, comparatively higher amount of water at assured and regular intervals and good soil conditions are required. It is mainly grown in the submountaneous parts and the tract immediately lying at the foot of the hilly region in the Ambala district. Corn is grown as a subsistence crop in Kalka and northern Naraingarh whereas in Jagadhri, southern Naraingarh, Ambala tehsil and Yamuna flood plain it is grown as a cash crop. Maize is also grown as a minor crop in eastern Gurgaon, south-eastern Sonepat, Karnal and Kurukshetra districts.

The area that is being taken from Jowar acreage because of increasing irrigated acreage in Haryana is beeing put to maize cultivation. Resultantly the area under this crop has increased from 817 thousand hectares (1966-67) to 1.185 lakh hectares in 1973-74. The per hectare yield also grew from 988 kg. (1966-67) to 1,004 kg. during this period. As a result of increased acreage and comparatively higher yields the total production of maize has registerd an increase from 86 thousand tonnes to 1.185 lakh tonnes during this period. But now a stage has reached when the farmers are in no mood to devote more land to this crop, instead they show a trend towards superior grain farming and cash crop cultivation.

Barley occupying about 2.28 per cent of the total harvested area of the state is a significant crop of southern Haryana, During the British rule in India the barley grown in this part was sent to London, Research institute of Brewing. After complete examination the Institute described the barley of southern Harvana of a very good quality, capable of producing good brew. The Institute then recommended the cultivation of barley on commercial basis in southern Harvana. But as already stated agriculture has never been a commercial trait with Indians and nor were the alien masters interested in the amelioration of tilling masses by way of teaching them 'commercial farming' a technique with which the Britishers were well conversant. The crop can be grown in semiarid areas on un-irrigated fields, on well drained light soils under moderate temperatures and low drizzle form precipitation, High humidity and higher temperatures hinder its growth and deteriorate the quality. Barley has been a good crop (Giffin's goods) for the poor people and a dependable cattle feed. People have been mixing barley with wheat and gram to get a mixed flour capable of making loaf, as loaf cannot be prepared from pure barley flour. Now with the spread of irrigation facilities wheat culture has

started replacing barley cultivation in some areas. Consequently the people now prefer to eat wheat than the inferior barley grain, Though barley is an important crop of Gurgaon and Mahendragarh district it is also grown in Jhajiar (Rohtak) and eastern Dadri (Bhiwani) areas. Small amount of barley is also grown in northern Guhla (Kurukshetra)

Due to changed socio-economic conditions the area and production of barley has considerably fallen in the State. The barley acreage has fallen from 1.82 lakh hectares (1966-67) to 1.54 lakh hectares in 1973-74. This period also witnessed a decrease in production from 2.39 lakh tonnes to 1.37 lakh tonnes. Similarly the per hectare yield fell from 1,313 kg. to 889 kg. during the same period.

Baira is the second important foodcrop of Harvana after wheat as it covers about 16.5 per cent of the total cultivated area of the state. The drought and heat resistant crop of bajra thrives well in the sand infested Bagar tract and low lying wide tract lying between the sand dunes (locally known as Tals) in the warm and less humid areas of Gurgaon, Mahendragarh, Bhiwani, Hissar and Rohtak. Among the millets grown in Haryana, baira occupies the most significant crop. "Albeit, bajra gives good yield of a high protein heat giving grain that stores well, suffering less from biological hazards than all other foodgrains, unfortunately it is generally unpopular as a food and has little market."4 About one half of the total baira acreage of the state is located in the districts of Bhiwani, Mahendragarh and Gurgaon, Hissar and Sirsa districts had considerable acreage under baira a few years ago but with the provision of increasing irrigation facilities the farmers are shifting from bajra to cotton cultivation. Bajra is almost conspicuous by its absence in northern parts of Haryana.

The production of Bajra has not so far shown a downward trend inspite of the acreage under bajra is increasing at a very slow speed. This is because of the high yielding hybrid variety being cultivated with improved methods of farming.

The acreage under bajra has increased from 8.93 lakh hectares (1966-67) to 9.56 lakh hectares (1973-74) whereas the production rose from 3.71 lakh tonnes to 6.91 lakh tonnes during this period. Because of the use of hybrid variety of bajra being grown now the per hectare yield has grown from 418 kg. to 723 kg. Because of climatic reasons the bajra crop in 1974-75 collapsed, but efforts are afoot to regain the earlier position.

Crop	1974-75	1975-76
Charif		
Paddy	392	590
Jowar	38	55
Maize	122	120
Bajra	214	660
Pulses	14	25
Total	780	1450
Rabi		
Wheat	1,956	2,375
Gram	341	672
Barley	240	136
Pulses	20	27
Total	2,557	3,210
Grand Total	3,337	4,660
Cash Crops		
Sugarcane (gur)	594	712
Oilseeds	145	115
Cotton ('000' bales)	425	493

Gram is used both as foodgrain and pulse. The gram flour is used in many saltish and sweet Indian dishes. The gram plant provides nitrogen as a nutrient to soil while its fruit provides protein rich diet to human beings. According to acreage Gram occupies about 18,25 per cent of the total harvested area and ranks second among the agricultural crops of the province. Needing less moisture, gram crop is raised in areas with moderate rainfall having well drained sandy loams or loamy sand light alluvial soils. Gram cannot be raised on alkaline soils or lands having high water table. Poor soils with low rainfall which are unfit for wheat cultivation are best suited for gram cultivation. Gram is grown almost all over the state of Haryana but the area of heaviest concentration lies in the western half of the state. Districts of Sirsa, Hissar, Bhiwani and Mahendragarh dominate in the field of gram cultivation, Jhajjar tehsil of Rohtak, Narwana tehsil of Jind and Guhla tehsil of Kurukshetra district are other tracts of dominance in this field.

The acreage, production and yields of gram have been widely fluctuating in Haryana. The acreage under this crop in 1966-67 was 10 62 lakh hectares and reached its climax (11.91 lakh hectares) in 1971-72 and fell to 9.93 lakh hectares in 1973-74. Similarly the production fluctuated from 5.31 lakh tonnes (1966-67) to 12.67 lakh tonnes (1967-68) and to 4.48 lakh tonnes in 1973-74. The per hectare yield of gram saw its climax (1092 kgms) in 1967-68 but in 1973-74 it was only 451 kg. These fluctuations have corresponded to socio-economic conditions as well as expansion of irrigated area in the state.

Besides gram other pulses like green gram (moong), black gram (urad), brown gram (moth), pigeon gram (arhar) and lentil (masur) are grown in various parts of the state. All these plants increase the fertility of the soil and hence are recommended as rotation crops especially after the harvest of soil exhausting crops. The areas of concentration for all these pulses are Ambala district, western parts of Bhiwani district and eastern parts of Palwal tehsil in Gurgaon disirict. Oilseeds are other such crops which increase the fertility of soil but Haryana is not in a position to afford considerable area for their cultivation, Mustard, rape, linseed, seasamum and ground-nuts are grown almost in insignificant quantities in Harvana, All the oilseeds combined cover only 3.5 per cent of the total cropland of the state. Vegetables are now being increasingly grown in areas around urban centres. Potatoes, tomatoes, cabbage, couliflower, brinjal, spinach, carrots, radish, onion, garlic, ladyfinger, pumpkin, cucumber, chillies, etc., are the major vegetables grown at different times of the year. Spectacular

achievements have, however, been obtained in the field of potato cultivation, one of the important crops to substitute foodgrains. Since the inception of Haryana as a new state the area under potato cultivation has gone up almost four-fold. Potatoes were grown on about 3,310 hectares of land in 1966-67 whereas in 1976 the acreage had risen to 11,800 hectares. Fruit like mango, guava, lemon, orange, grapes (Australian variety) and ber are grown in Haryana. The acreage under fruit has risen from 7,865 hectares in 1966-67 to 13,946 hectares in 1974-75. Out of this acreage about 400 hectares were devoted to grape cultivation. Keeping in view the increasing production of Australian grapes the state authorities are taking steps to process the same as direct human consumption of such grapes is not very encouraging.

Sugarcane and cotton are two important cash crops of Haryana. These cash crops have helped to strengthen the economic condition of farmers. Realising their utility as such, steps have regularly been taken to improve upon the cultivation of these cash crops since the inception of Haryana. Since very remote times Haryana has been cultivating sugarcane and districts of Ambala, Karnal and Rohtak (irrigated tracts) had a vital position in this field even in composite Punjab. Farmers have always been pleased to grow sugarcane for the production of jaggery (gur) and brown sugar (khandsari) for their own use. Sugarcane is extensively grown in areas having well drained medium heavy soils, uniformly high temperatures (for about 7 to 8 months), ample sunshine and well developed irrigation facilities. Though 125 cm. to 150 cm. of annual rainfall is sufficient for this perennial crop but long dry spells can ruin the crop. Because of this reason only sugarcane is found in north-eastern corner (around the sugar mills of Yamuna nagar) and Panipat-Rohtak (around the sugar mill at Panipat) tract. At present besides meeting the demand of three sugar mills, Harvana sends sugarcane to the mills of neighbouring states also. Two more sugar mills are comming up in the state. Sugarcane is also grown on sufficient land in south-eastern Palwal, northern Jhajjar, southern parts of Jind and Safidon.

It is heartening to note that the production of gur has increased from 5.1 lakh tonnes in 1966-67 to 5.93 lakh tonnes in 1973-74, inspite of the fact that acreage under sugarcane during this period descreased by half thousand hectares (150 thousand hectares to 149.5 thousand hectares) during this period. Per hectare yield in terms of gur increased from 3,400 kg. to 3,966 kg. over the same period. However, the yield during 1969-70 was 4,689 kg. In the same year the acreage under sugarcane was 169.4 thousand hectares and production of gur rose to 7.92 lakh tonnes. The fluctu-

ations in acreage and production have responded to demand and price prevailing at different times.

Cotton the another cash crop of the state has meant prosperity to the growers. Climate is the limiting factor for cotton cultivation. In areas with adverse climatic conditions even the most favourable soils cannot promote cotton culture. Cotton is essentially a dry zone climate. It can be grown in areas that receive 30 cm. to 50 cm. of annual rainfall. To make available good soil, moisture (needed by the cotton plant in its early period of growth) irrigation facilities come to the rescue of the farmer in an otherwise area of very uncertain rainfalls. Picking requires sunshine and absence of precipitation, lest the bursting balls get badly damaged. The cotton belt of Haryana extends over the districts of Hissar and Sirsa where 20 to 40 per cent of the total harvested area is devoted to cotton cultivation in different parts and especially Fetchbad, central Sirsa and northern Dabwali tracts. Cotton cultivation has also picked up in southern Sirsa, Hansi and central parts of Narwana,

The acreage under the cotton crop has successively shown a rise. The acreage rose from 1.83 lakh hectares (1966-67) to 2.52 lakh hectares in 1973-74. Similarly the production of cotton has increased from 3.74 lakh bales to 4.41 lakh bales in this period and it rose to 4.25 lakh bales in 1976. Both American and indigenous varieties of cotton are grown in Haryana. American cotton gives higher yields which reached its climax (359 kg. of cotton per hectare) in 1970-71. The indigenous variety has never given a yield above 300 kg, so far.

### Live-Stock

Cattle breeding is perhaps the only avocation that was never lost in history of Haryana. Once the region renowned for its greenery and granary and artistic skills, became dry, sand parched, barren, poor and backward as a result of natural calamaties and human avarices, but it was known all over the country for its healthier bulls and cows. Probably the climatic changes created a conducive environment for cattle breeding. In most of Haryana and particularly south and south-west rainfall decreases. This checks leaching and the calcium content in the so I remains almost intact. The calcium content of the soil renders the grasses grown on it quite nutrient. The grasses and fodder raised on such soils provide very good forage to animals which in turn become healthier and sturdier. The crops grown in this area like jowar, bajra, corn, barley, etc., are also semi-fodder type. The physical features of this region also provide ideal breeding ground. Now when canal irrigation is extending to these areas some places are losing importance as cattle breeding tracts. But the cattle are indispensable to rural economy since they provide proteins and fats through their milk and milk products to the predominatly vegetarian ruralities of this state. In the past Gujjars and Ahirs might have been excellent and probably the only cattle breeders in Haryana but now this economic activity is carried on as a subsidiary occupation by all tillers of soil on the entire length and breadth of the province." As a dairying state, Haryana is perhaps not favourably circumstanced because, over a great part of its agricultural area, climatic and agronomic conditions may not be favourable to dairy production, Extremes of climate-the ungenerous rainfall, the devastating droughts-do not help the growth of dairing as complementary to arable farming as in the Western Countries."5 But this does not mean that if Haryana is unable to develop a dairying belt as in the U.S.A or it can have the dairiag industry of the magnitude of Denmark and other European countries, she is unable to raise cattle for its domestic needs and spare little surplus for neighbouring states. In the field of irrigation and industry Haryana has truthfully proved the old maxim, 'where there is a will, there is a way'. And now the state is well poised to develop dairying through co-operatives at selected spots. The state may not be able to market her products in international markets like New Zealand and Denmark do but she has already proved her mark in the state and some neighbouring states.

Haryana has a cattle population of more than 70 lakh heads and the density comes to about 140 animals per square km. The relation of human and live-stock population stands at 10:7 in the state. This shows that Haryana has attained a significant position in the cattle breeding activities on the map of India. But this huge population of live-stock contains a sizeable number of aged, weaklings and useless cattle the elimination of which is not possible because of religious reasons.

Indian Council of Agricultural Research established National Dairy Research Institute (NDRI) at Karnal in 1955. This Institute which is the biggest in Asia strives for the advancement of research and training in dairying, and dissemination of information in the country through its extension programmes. The Institute pursues research on problems of cattle breeding, physiological and nutritional aspects of cattle for high milk yield, processing of milk, preparation of milk products, study of management and dairy engineering and the evaluation of chemical, bacteriological and nutritive quality of milk and its products. The Institute is render-

ing immense and useful services in its fields over the entire country. Situated on the Grand Trunk Road the milk parlour of the institute not only serves the urban centre of Karnal with bottled milk, powdered milk, ice cream, processed cheese, cheese, ghee, butter and many other products but also serves the passangers halting here to have a look on this magnificient institute.

Harvana is proud of its live-stock farm at Hissar which is again the premier Institution of livestock breeding all over Asia, In this farm previous foundation stock of various breeds of animals like Sahiwal, Tharparker breed of cattle, Murrah buffaloes, exotic Yorkshire pigs and Nali and Hissar-Dale Sheep are maintained. Now cross breeding is also carried on in this farm for producing pure study of Jersey breed. Many provinces have been drawing their requirements of breeding bulls of different breeds as also bullocks for draught power from this farm. Similarly the Indo-Australian Cattle Breeding Farm, Hissar; Progeny Testing Farm, Hissar: Buffallo Breeding Farm, Hissar; Jersey Cross Breeding Station, Jagadhri are rendering yeoman's services to the state for the improvement of its live-stock. Sheep Breeding Farm Hissar: Wool Grading and Marketing Centre, Loharu; Piggery Development Farm, Ambala are also providing useful services in this field.

### The White Revolution

Inspite of Haryana's countrywide reputation for its cows and Murrah buffaloes not much attention was devoted for dairy development in the state. Out of Rs. 50 crores spent on dairy development in India during the first three Five Year Plans a paltry sum of Rs. 4 lakh only was spent in Haryana (a state renowned and conducive for cattle breeding) for setting up a small dairy at Hissar. After reorganisation steps were taken to develop dairying the crude form of which existed on subsistence scale in the country side. Towards the end of 1967 Dairy Development and Milk Supply Department was created. But the real development of this economic activity started when the aforesaid department was converted into a Corporation on the new year's day of 1970. During the Fourth Plan period the Corporation spent a sum of Rs. 2.10 crore for dairy development. Corporation spent this sum on the installation of three milk plants. The first plant was commissioned on 5 December 1970 at Jind. The plant processes milk into butter, ghee, whole milk powder and skimmed milk powder. For the first time in the country the processing of instantised skimmed milk powder has been undertaken at the Jind milk plant. Under the trade name of Vita the milk products are available in Haryana, Punjab, Himachal Pradesh and Delhi. The second milk plant was commissioned at Bhiwani on 28 October 1972. The plant processes full cream and skimmed sweetened milk. This is the first plant of public sector in our country that started manufacturing much sophisticated product like sweetened condensed milk. To cater to needs of city dwellers of the twin cities of Ambala and Ambala Cantonment a third milk plant producing hygenically pasteurised and bottled milk was commissioned at Ambala on 29 August 1973. Besides these products, the plant also prepares sterilized flavoured milk, ice cream and cheese.

Currently the Corporation has undertaken the expansion of Modern Dairy at Hissar, the setting up of three composite plants, one liquid milk plant and two rural dairy cum distribution centres. The work for setting up a liquid milk plant at Faridabad is already in progress. Besides supplying hygenically treated pasteurised bottled milk to the expanding industrial complex of Faridabad, the plant would also produce sterilised flavoured milk, yoghurt and ice cream for which a wide market exists in the neighbouring cosmopolitan twin cities of Delhi and New Delhi. Another milk plant is under construction at Rohtak and is likely to be commissioned in near future. This plant will manufacture butter, ghee, whole and skimmed milk powders. Two milk chilling centres at Rewari and Nuh are to be installed in near future. It is hoped that by the conclusion of Fifth plan period the entire state would be covered by milk plants or milk chilling plants or rural dairies cum distribution centres, thereby creating 'milk-grid' in Haryana, The milk bucket of Haryana is now well on its way to upgrade its animal wealth to excellent standards on modern and scientific lines resulting in a lead to usher 'White Revolution' in our country.

In our country as a whole Haryana leads in the availability of per capita milk at present. Compared to the all India average of about 110 gm. the per capita availability of milk in Haryana is 520 grams. A decade ago when the new state of Haryana emerged on the political map of our country the total annual production of milk in the state stood at 11 lakh tonnes. Since then the production is steadily on the increase and it is expected that in near future the production would cross 22 lakh tonnes mark. The high production of milk is the result of Intensive Capital Development Project.

Nearly 6 lakh animals out of a total of 20 lakh breedable cattle have been covered by this project. This project seeks to improve the quality and yield of cows and buffaloes through cross breeding of indigenous cows with more potential and exotic bulls and selective breeding of buffaloes by mating these with proven Murrah buffalo bulls.

# Industrial Progress and Trade

Haryana has been an agriculture dominated region since time immemorial but it had an industrial tradition of its own also. In ancient times the artisans and craftsmen of this area were renowned all over the country for their artistic skill and acumen. It is collected from the sources of ancient Indian history and culture that during the ancient regime of Yaudheyas attention was paid towards the development of cottage and small scale vocations. The famous Sanskrit bard Van Bhatt has paid rich tributes to the art of manufacturing that prevailed during Harsh Vardhana's time. He has fervently praised the ornaments produced by the goldsmiths and silversmiths of that period. It is also gathered that the art of dveing and printing the cloth had reached its climax in and around Sthaneshwar (Thanesar) during that period. After that period the history of this region is strewn with wars, battles, skirmishes, feuds, chaos, confusion and turmoil. This type of atmosphere is not conducive to art and manufacturing. The people of this area had to be ever ready to face foreign aggressions for a long time and thereafter they waged and continued a consistent attempt to uproot foreign domination from India. These activities left no time for the people to concentrate upon art, manufacturing and other minute

activities. It seems that they had avowed to live on the bare and minimum necessities of life so long as they did not breath in free environment. To appease the goddess of battle and struggle they had pledged to abstain from luxuries and comforts of life that are contributed by art and manufacturing. In their effort to free their motherland from foreign yoke they at times neglected their primary activity of agriculture also. Their scant attention towards their major profession during the long period of struggle very badly and adversely affected their agricultural prosperity. The region that was once known for its greenery and granary slowly and gradually marched towards deficiency mainly because of human neglect and natural calamities,

After the attainment of self rule our planners, economists and torch bearers gave top priority to agriculture in the country as a whole. Though Haryana too received some benefits from the planned progress but keeping in view its geographical area, population and time she received proportionately far less benefits than the neighbouring region of Punjab. It is only after the formation of Haryana as a full fledged separate state that agricultural revolution set its wheels on its soil and in a couple of years Haryana was the second state to witness 'Green Revolution' with sufficient amounts of surplus foodgrains in the country. On the other hand, no doubt some industrial complexes had been developed in Haryana mainly to rehabilitate the refugees migrating from Pakistan yet it led to regional imbalances in the field of industry. It is a fact of common knowledge that nations and states that depend solely on agriculture tend to remain perenially poor. The major agricultural nations of vesterday like the U.S.A., the U.S.S.R., Canada, Japan, etc., became prosperous and affluent on the initiation of industrial revolution only. After attaining self-sufficiency and prosperity in the field of agriculture such nations inevitably reached a saturation point in their economic development when they felt the urgency of harnessing their industrial potential for the maintenance and improvement of the general standards of living of their people. Haryana is no exception to this rule. Now when Haryana has become agriculturally a surplus state she is taking long strides in the field of industry too. Infact the agricultural prosperity too was the result of industrial plants manufacturing tractors, threshers, harvest combines, chemical fertilizers, insecticides, generators, drillers, etc., located in Haryana or outside. To sustain the agricultural prosperity as also to raise the standard of living of its people and to provide jobs Haryana has accelerated its tempo of industrialization.

Harvana inherited about 35.8 per cent of the total geographical area of the composite state of Punjab on 1 November 1966.

Not only large tracts of infertile, sand-infested and unirrigated areas fell to the lot of Haryana but the new state did not find industrial complexes of the dimensions of Amritsar, Batala, Jullundur and Ludhiana, Textiles of Amritsar and Hosiery industry of Ludhiana had made a niche on the industrial map even in pre-partition days. Ambala which had a prosperous glass industry even before First World War gained momentum as a centre of scientific intruments industry in post-partition period. Similarly Panipat and its surrounding villages had developed blanket manufacturing industry by the end of the second decade of the present century. started producing about 200 blankets daily in recent years. Woollen industry also sprang up in this town in the thirtees of the present century. Bhiwani also developed as cotton textile centre though of a smaller dimension by 1915. In the thirties of nineteenth century Jagadhri emerged as brass utensil manufacturing town whereas in the neighbouring town of Yamunanagar a sugar mill, a paper mill and a starch mill came up during the same decade. In post-partition period Faridabad, Gurgaon and Bahadurgarh were developed as industrial centres mainly to rehabilitate the refugees who would have otherwise aggravated the 'industrial position' of Delhi. The composite Punjab could not boast of large scale and heavy industry. She had medium and small scale units which numbered 12.839 at the time of bifurcation of new states. About one-third of these units only fell to the share of Haryana, "Some economists felt that the new state would find it difficult to sustain itself economically for long. The absence of raw materials in particular important minerals like coal, gas and petroleum was a shortfall that could not be made up easily. Water resources in the area were meagre. For electric power, it had to depend on the generosity of neighbouring states."1

The leadership of this young state did not lose heart at the site of such a gloomy picture. With purposiveness the people, planners and leaders of this new state rose to the occasion and determined to win the fight for survival at any cost. Every available resource (human, water, land, mineral, etc.) was mobilized in such a way that a maximum benefit could be derived from each resource to increase the production of existing units. When they found that their continuous toil is bearing fruits and the tiny complex of industry gathered a well poised momentum then plans to break new grounds were drafted and initiated. Today Haryana has come out of the marsh of industrial backwardness and ranks among the eight most industrialized states of India, The progress can be ima-

gined from one single example that in 1976 Harvana had 17,670 small scale industrial units where as in 1966 this number stood at only 5,247.

On the industrial map of Haryana one finds two triangles (one large and other tiny), which enclose 75 to 80 per cent of the industrial centres of the state which at present account for about 90 per cent of Haryana's industrial production. The three points of larger triangle are located at Panipat, Ballabhgarh and Hissar. The industrial towns of Panipat, Sonepat, Bahadurgarh, Gurgaon, Faridabad, Rohtak, Bhiwani and Hissar fall on the body of this triangle. The tiny triangle covers the industrial centres of Ambala, Jagadhri and Yamunanagar which also form the three points of this triangle.

Faridabad (Gurgaon district) is the biggest industrial centre rather the nerve of industrial activity in Haryana. "Indians are determined to get moving" are the words which a European uttered while travelling in a Taxi that passed through Faridabad. These words came out of his vocal chords only after seeing the road side industrial plants and not all those that litter on the entire landscape of the township. The Jat Chief Babu Singh once occupied the Ballabhgarh fort the surroundings of which were occupied by many Jat villages and Faridabad was one such village in the midst of thick forest. After partition the village became a site of a huge refugee camp. To begin with the refugees started cottage and small scale units to eke out their living. Government also wanted to avoid the narrow streets and slums of Delhi from the on rush of swarming human currents. Hence the government also planned to develop Faridabad as an industrial township. This inspired the refugees whom the circumstances had turned to be extra bold. adventurous and innovaters. Faridabad is one of those industrial centres of Harvana that derive an advantage of the proximity of cosmopolitan Delhi. Finding the market next door for various industrial products the entrepreneures from all over the country virtually fell over one another in a bid to secure licenses to set up their industrial units in Faridabad. Those who failed to get an opportunity here preferred Gurgaon and Bahadurgarh the two other industrial nodes of Haryana located in the vicinity of Delhi. The result of this competetion is that Faridabad today houses about 650 industrial units of all sizes. In this industrial township are located about half of the State's large scale and medium sized units along with a fairly large number of small-scale units. Engineering goods, agricultural implements, glass products, rubber products, chemicals, leather goods (including shoes), electrical goods (including refrigerators), cycle parts, metal products, plastic goods,

special type paper, tractors, motorcars, motorcycles, scooters, etc., are the leading industrial products of Faridabad. The chief characteristic of this industrial centre is that components needed by the large scale and medium sized units are produced in the town itself by the small scale units meaning thereby that they are complementary to each other. About one lakh persons have been provided jobs by the industries of Faridabad.

Bahadurgarh is another vital industrial centre of Haryana where also an industrial township has been raised on the Delhi-Hissar road. Bahadurgarh produces electrical goods, radio parts, cycles and cycle parts, metal products, pottery, sanitary goods, laboratory glass-ware and other scientific apparatus, optical lenses, stainless steel instruments, machine-tools, hospital equipments, special variety of paper, salt petre, etc.

Gurgaon has emerged yet another industrial node to the southwest of Delhi. Gurgaon specialises in the manufacturing of pottery, cutlery, rubber goods, automobile spares and padlocks. The pottery industry was started in Gurgaon in the year 1957. The industry which initiated with one factory has progressed to such an extent that now Gurgaon supplies china clay wares, sanitary wares, earthen wares and insulators not only to Haryana and Delhi markets but to many other markets located on the breadth and length of our motherland.

Hissar housed a cotton textile mill in 1955 to take the advantage of increasing cotton cutlure in dry zone of Hissar. "This factory on a sand dune infested extensive site, outside the town of Hissar has created a nucleus for a new urban centre." Cotton ginning and baling activity is also carried on in this town. With the establishment of Haryana Agricultural University numerous industries producing engineering goods and agricultural implements have sprung up on the Hissar-Hansi road. Many consumer goods industries have also been started in this town. Electrical goods, hosiery goods, handloom goods, plastic goods, rubber goods are the recently added items to the industrial products of Hissar. A Steel Billets project, and The Poly Steel India Ltd., a project in the joint sector have also come up at Hissar. One wonders to see the phenomenal growth of factories along the Hissar-Hansi road that have come up in recent years only.

Bhiwani is another cotton textile centre of Haryana. The mills here have about 800 powerlooms and over 33 thousand spindles. The weaving, printing and dyeing cells are attached to these mills.

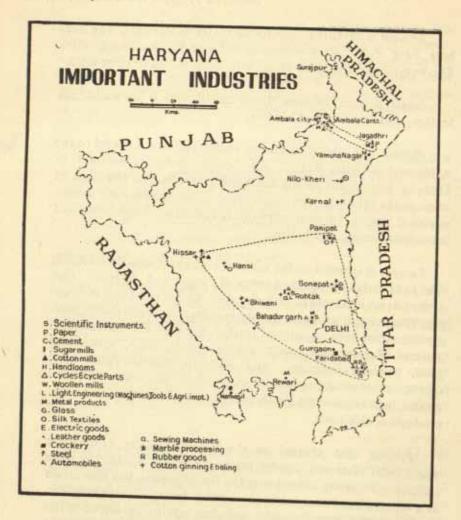
Hansi a town between Hissar and Bhiwani is known for silk textiles, cotton ginning and baling.

Rohtak has also become an industrial town. Located to the north-west of Delhi, Rohtak also benefits from its nearness to Delhi a large centre of commerce and trade. Rohtak has made its name in the production of sugar, cycle parts, automobile spares, electrical goods, surgical appliances, agricultural implements and for cotton ginning and baling.

Sonepat is situated on the national highway (GrandTrunkRoad) that links Delhi with leading towns of Punjab and Haryana, One of the largest cycle works of India, Atlas Cycles is located in Sonepat. This concern produces quality bicycles, cycle rickshaws, perambulators not only for internal markets but also for international markets. Buttons, salt petre, electric goods, glass, agricultural good, weighing machines, steel furniture, electric poles, cycle spares, rubber goods, optical lenses, machine tools, chemicals, glass bottles, light engineering goods and steel are other noted industrial products of this town.

Panipat, also situated on the national highway, is the place where India's fate was decided thrice and where Hindus lost three chances of regaining control over the Indian throne, has now arisen as a reputed handloom centre in northern India, Blanket manufacturing, utensil manufacturing and glass making developed in this historic town in the twenties of present century. In the thirtees the woollen industry came into being in this town whereas silk textile industry is the addition of post partition days. As already stated about 150 small scale units produce handloom products and especially thick bed sheets (Khes) and woollen blankets. A sugar factory has also been established in this town. In recent years a number of units manufacturing agricultural implements, steel rollings, pipes, trunks and chemicals have emerged in this town. Cotton ginning and baling and button manufacturing are also carried on here.

Ambala City manufactures glass and also houses cotton ginning and baling.



Ambala Cantonment is a significant producer of scientific and surgical goods in northern India. Metal products, handloom durries, bamboo products, globes and charts are other important products of Ambala Cantonment. Ambala Cantonment has also housed a beautiful planetorium and now manufactures the planetoriums for schools and colleges.

Jagadhri and Yamunanagar have shot up in prominence in post-independence period. Jagadhri had already been a centre of brass utensil manufacturing and now about 700 small scale units carry on this work. Yamunanagar has a sugar mill, saw mill and a hydrogenated oil factory. Metal products are also manufactured in this town. Gopal paper Mills was started in Jagadhri in pre-partition days. Now Jagadhri houses the largest paper mill of Harvana. Recently the Delhi Pulp Industries and Murari Paper Mills have started manufacturing paper at Faridabad, Cardboard is manufactured at Karnal. The Jagadhri paper mill produces about 40,000 tonnes of paper per annum and gives employment to more than 32,000 people. Jagadhri has also a sugar mill and a starch producing plant.

Some other important manufacturing items of Haryana are cement (Dadri and Surajpur), match box (Buria near Yamunanagar), Brewery (Murthal), marble slate unites (Narnaul and Kund), mechanised tannery (Jind), gur (jaggery) and khandsari (brown sugar), lime klins (Narnaul), flour mills, rice husking machines, milk plants, milk products, cattle feed, poultry feed, slate processing, etc.

## Latest Trends

To establish resource based and labour intensive industries the State government have set up Industrial Development Corporation. The funds to raise such industrial units are provided by the State Government and other financial institutions. The Corporation has helped in the procurement of letters of intent and licences for many concerns like Brewery, Tannery, Glass Bottles, Cigarettes, Cigarette Paper, Steel Billets, Nylon Filament Yarn, Television, Walkie Talkie Sets, Marble Processing Factory, Match Box Project, Synthetic Detergents, Sponge, Iron, Caustic Soda, Cellulose, Nitrate, Rice Husk Board, Wire Rod Mill, Spinning Mill and Forged Hand Tools.

Harvana Financial Corporation grants loans upto Rs. 30 lakh to limited concerns and co-operative societies and Rs. 15 lakh to others. The loans are granted to acquire fixed assets. Margin money may also be provided by the corporation where working capital can not be managed from other sources. The rate of interest varies from 10 to 12 per cent depending upon the size of the unit. In backward areas, however, the rate of interest is reduced to 9 per cent. Financial assistance is also granted to small scale units, artisans and craftsmen on concessional rate of interest.

The Haryana State Small Industries and Export Corporation helps the small scale units by procuring them essential and scarce raw materials, i. e., iron and steel, chemicals, mutton tallow, alluminium, non-ferrous metals, yarn and dye. In times of power shortage coke was also routed through the corporation. The furnace oil is also being provided by the government instead of any private company. The Corporation has also conducted industrial surveys of Haryana in collaboration with the Indian Institute of foreign Trade. As a result of these efforts, orders for Haryana goods were secured from Middle East, East Africa, South East Asia, Europe and the United States of America. Haryana exported 33 crore rupees worth of its industrial products to these countries in 1974-75 against Rs. 12.26 crore in 1972-73.

The Industries department of the State Government has set up fifteen Industrial Estates, nine in rural areas and six in urban areas. The urban Industrial Estates have been located in the towns of Nilokheri, Sonepat, Gurgaon, Narnaul, Hissar and Ambala, Those for rural areas have been established at Kaithal, Kohand, Rai, Palwal, Sohna, Fatehabad, Mahendragarh and Pinjore, All these industrial estases, contain 226 sheds which were in the first instance rented out. But now it has been decided to allot these sheds on hire purchase basis. The Department has also laid down Industrial Development Colonies at Ambala, Rohtak, Karnal, Rai, Gurgaon and Hissar. The schemes to start such colonies at Gohana, Jind, Rewari, Jakhal, Tohana and Karnal are receiving the active attention of the government. As an ancillary to Tractor Plant of Hindustan Machine Tools, Pinjore, an industrial estate at Panchkula is being raised. Industrial land has also been developed at Gurgaon, Faridabad, Panchkula and Bhiwani by the Town and Country Planning Department, Similarly the Haryana State Industrial Development Corporation has also developed land for Industrial Estates at Yamunanagar, Murthal and Gurgaon.

The Government of India have declared the districts of Mahendragarh, Bhiwani, Hissar and Jind as industrially backward districts and these districts are entitled to procure 15 per cent capital subsidy for the emerging units from concerned authorities. Rewari, Bhiwani, Jind, Tohana and Hansi are being developed as Industrial Growth Centres to speed up the industrialization of these backward areas. Haryana has also planned so me Incentive Area

Development projects under which special concessions and incentives are being extended to prospective entrepreneures for starting new industries in selected rural areas. Such rural industrial projects have already been sanctioned for Karnal and Ambala districts. The techno-economic survey of Chhachhrauli (Ambala district) has already been completed. The survey work for Karnal district is fast approaching its end. A new project for Kurukshetra district has also been sanctioned. The aim is to cover the entire province under the programme of rural industrialization by the end of Fifth Five Year Plan period.

#### Trade

No nation, state or region can live by itself alone. The lines that carry foodgrains, industrial products, medicines, stationery, books and other consumer goods to and from the states and regions are the arteries similar to the ones that circulate blood in living beings. The excess of exports over imports is the measuring rod of a state's stage of economic development. There is no strict rule that an article being exported by a state cannot be imported from other states. Sometimes an article of particular quality or grade (as cotton with its different staples) is exported and a higher or lower grade of the same article is imported also. Scmetimes for a particular place it is cheaper to import an article from the adjoining part of the neighbouring state than to bring the same article from a far flung place located within the same state. For example it would be cheaper for Ambala to import cotton textile goods from Ludhiana than to procure the same from Bhiwani or Hissar, Similarly it is convenient for Jakhal (Haryana) to import sugar from Dhuri (Punjab) than to obtain it from Jagadhri, Yamunanagar, Rohtak or Panipat, This way it can be safely expected that Haryana would be exporting many commodities and at the same time importing same commodities in varying quantities because of convenience. But the balance of export and import of a particular commodity can speak about Haryana's position with regard to the production and surplus of that commodity. The table on next page depicts Haryana's position with regard to its trade in foodgrains with other states of India:

Earlier when unscruplous trader had his sway in the field he used to export any quantity of foodgrains to other states much at the cost of states' poor population. But now when there is strict control and vigilance on the movement of foodgrains only real surplus is exported. The latest data reveals that (taking balance)

Trade in Foodgrains (Quintals)

Commodition		1967-68		S Application of	1973-74	3-74	
Commoanty	Export	Import	Balance	Export	Import	Bal	Balance
Rice	16,022	544	+15,478	9,803	1	+ 9,803	)3
Jowar	882	1,499	- 617	775	491	+ 2	284
Bajra	6,879	1	+ 8,879	2,393	1	+ 2,393	93
Maize	35,523	237	+ 35,286	35	1	+	35
Wheat	73,374	446	+ 72,978	10,326	1,000	+ 9,326	56
Barley	92,751	5,665	+ 87,086	12,251	436	+ 11,815	15
Gram	1,77,351	6,011	+171,340	19,201	7,652	+ 11,549	65
Other Pulses	34,247	38,703	4,456	4,731	1,738	+ 2,993	93

Haryana does not import foodgrains but instead has started exporting large quantities of foodgrains. One thing more has come to the light that with ever-increasing irrigation facilities, improved seeds and application of improved techniques of farming the farmer is slowly shifting from the cultivation of coarse grains (jowar, bajra, maize) to superior grains like wheat and rice. Hence the export of some of the coarse grains is falling.

Among other major exports of Haryana are included live-stock (milch cattle, sheep, goat, bullocks) hides, skins, tanned leather, leather goods (including footwear), glass, glass products, lime and lime stone, oil seeds (major part of rape and mustard), vegetable oils, hydrogenated vegetable oils, oil cakes, khandsari (brown sugar), gur (jaggery), cotton, cotton twist and yarn, ginned and baled cotton and myrobalans (amvla), etc., to many states of India. Similarly paper, sugar, utensils (brass and stainless steel), agricultural implements, scientific instruments, surgical apparatus, slate, beer, cycles, cycle parts, cycle rickshaws, milk products, cattle feed, poultry feed, cement, plastic goods, radio parts, metal ware, crockery, sanitary ware, cutlery, handloom goods, blankets, electric goods, etc., are the industrial products of Haryana that have found markets at home and abroad. Among its imports are listed the commo dities like tea, coffee, Indian hemp, jute, tobacco, raw rubber, timber, sports goods, cotton piece goods (foreign as well as Indian), dry fruit, iron and steel bars and sheets, coal, petroleum, petroleum products (including cooking gas), common salt and raw wool. From the balance of trade it appears that Haryana is steadily marching towards the upward trend on favourable side.

Now with new government in the centre it has recently been decided that there would be no restriction on the movement of foodgrains from one state to another. For the present the decision applies to wheat only and now there will be no wheat zones. Similarly in the procurement of food grains the government will enter the market only when the farmers are at a loss. Many people fear that this liberal policy may harm the consumers and producers as well. However, if the policy is implemented in right earnest and with strict vigilance the fruits are bound to be satisfactary.

# People and Way of Life

On the dawn of 1 April 1971 there lived 10,036,808 persons in the state of Haryana in accordance with the first census of the State. This showed a decennial growth rate (1961-71) of 32.23 per cent. This means by this time the population of Haryana has reached about 10,400,000 persons. Covering about 1.44 per cent area of the Indian Union, Haryana carries 1.8 per cent people of the country. In the descending order the young and small state of Haryana ranks fifteenth on the population front, Nearly 82.34 per cent of the persons have been classified as ruralites leaving barley 17.6 per cent of the population as town dwellers. The entire population of Haryana lives in 6,731 villages and 65 towns. There are 333 uninhabited villages in Haryana. The predominance of rural population hints towards the agrarian economy, for which Haryana has niched a place on the agricultural map of India, Though in 1971 there were 15,96,825 households in Haryana but they occupied 14,70,426 residential houses in the state. This speaks of the housing problem in the state. The census further revealed that on the average 7 persons occupied each 'census house' whereas 4,393 persons were houseless. The literacy rate (including 0-4 age group) was 26.89 per cent, and 26.44 per cent of the entire populace was classed as workers. There were 867 females to 1000 males against 932: 1000 ratio for the country as a whole. The density of population in the state was 227 persons per square km. against the national density of 182 persons per square km. This density had increased from 122 in 1961.

Further analysis of the detailed data revealed some interesting results. The decennial growth of population (1961-71) was maximum in Hissar (40.48) per cent and minimum (22.20) per cent in Mahendragarh district. The highest density (312) is found in the present district of Sonepat and lowest (150) in Bhiwani district. The sex ratio (females to one thousand males) was highest in the district of Mahendragarh (916) and lowest (846) in Gurgaon, The district of Jind had the highest percentage (89.03) of rural population while Karnal (79.45) had the lowest. In other words it meant that Karnal had the highest percentage (20-55) of urban population while Jind (10.97) had the lowest percentage of city and town dwellers. Among urban agglomerations Panipat had the highest density (11,323) and Ambala Cantonment (2,827) had the lowest urban density. As far as the housing in urban areas is concerned in cities of Karnal and Panipat there were 149 houses each for one thousand persons and presented an acute phase of the housing problem. In Ambala Cantonment the number of houses per 1000 persons was 215. An analysis of religious groups revealed that 89.23 per cent of the total population of state consisted of Hindus as against the countrywide percentage of 82 72 per cent. Sikhs followed the Hindus in percentage. They constituted 6.29 per cent of the State's total population against an all India figure of 1.89 per cent. It may be recalled that most of the Sikhs in Haryany are the immigrants from Pakistan and their offsprings. Muslims came third in this order. About 4.04 per cent of the people living in Harvana were Muslims against the national figure of 11.21 per cent. Most of them belong to Mewat area of Haryana Before partition a large number of Muslims lived in the districts of Hissar, Rohtak, Gurgaon, Karnal, Ambala and Mahendragarh. A large number of them migrated from all these areas except from Gurgaon. In 1941 the districts of Hissar, Rohtak, Karnal and Ambala had Muslim population of 2,85,208; 1,66,569; 304,346 and 2,68,999 respectively. In 1951 the numbers had fallen to 3,312: 2,562, 3,658 and 23,106 respectively in these districts. But the number of Muslims in Gurgaon district had fallen to 1,63,663 from 2,85,992. Hence the present Muslim population in the state is mostly concentrated in Gurgaon district.

On the 'Work Front' district Hissar was at the top with 28-62 per cent of its total numbers classed as workers. Mahendragarh was on the lowest rung of the ladder with a figure of 23.06 per cent. On the whole 66.7 per cent of all the workers were engaged in the primary economic activities of farming, fishing, forestry, hunting and animal husbandary. About 49.1 per cent of the total workers were engaged as cultivators and 16.2 per cent as farm labourers leaving only 1.4 per cent engaged in other primary pursuits. Out of the total workers 12 per cent were found to be working in seconary sector, i.e., in mining-quarving, construction, household industry and other industry. The rest of the 21.3 per cent of the workers were engaged in tertiary economic activities. i.e. trade, commerce, transport, communications, storage and other services. Out of the total number of 25,53,993 workers in the sate only 1,12,416 were famale workers. It means only about 4 per cent among the workers were women. It sounds quite unreal that in agricultural state of Haryana where majority of the working-age women work shoulder to shoulder with men in the fields, percentage of women workers should emerge so low. If we minutely analyse the methods of census operation then the reason behind this low percentage is self evident. In our villagers only that person is a cultivator who ploughs the field. Since ladies do not plough the fields they are not classed as cultivators. On the other hand only those female workers are catagorised as 'Agricultural labourers' who work on fields other than their own and get wages. It means that all those women who work on their fields and carry on the operations like weeding, hoeing, thinning, reaping, threshing, winnowing, manuring, etc., are not classed as workers. In rural Haryana there is a large number of such women who are unfortunately not classed as workers. Hence the number of famale workers is bound to be low.

We have already noted that the literacy rate in Haryana in 1971 was 26.89 per cent. In the district-wise break up it was found that the district of Ambala had the highest literacy (35.54 per cent) and the district of Jind (17.55 per cent) had the lowest literacy rate. It is quite strange that district Rohtak with maximum educational facilities did not top in literacy. The only plausible reason seems to be a large number of armed personnel stationed at Ambala Cantonment who carry almost a cent per cent literacy rate in accordance with our census requirements. On the other hand Jind with almost 90 per cent of its rural population is bound to show the lower literacy rate. As in all other rural areas of India education has yet to make a major breakthrough in the villages of Haryana.

About 18.89 per cent of the total population of Haryana consisted of scheduled castes. This was quite lower to the national

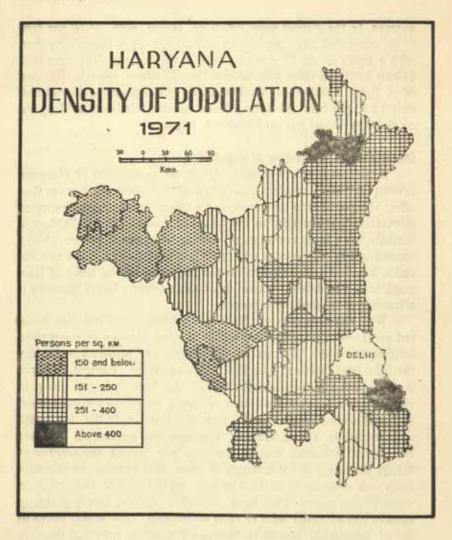
average. In the district wise break-up Hissar with 22-50 per cent of its scheduled caste population was at the top whereas Gurgaon with a figure of 15.53 percent was at the bottom. It is clear that Hindu society is more caste ridden than Muslims society. Because of a large number of Muslims living in Gurgaon the district had only 15.53 per cent of its population as scheduled castes, Harvana on the other hand has no scheduled tribes.

## Density and Distribution of population

A look at the map showing density of population in Harvana reveals the interplay of various physical and economic factors that affect the population distribution at a place. The highest density of population was recorded in the tehsils of Ambala and Ballabhgarh. Ambala has a large cantonment besides industrial progress being carried out in the city as well as Cantonment for the last two decades. Similarly Ballabhgarh has the largest industrial town of Haryana. i. e., Faridabad, where day-to-day leaping heavy industry is attracting more and more people.

With the exception of Naraingarh tehsil (semi-hill choe infeated area) entire eastern Haryana has a good density of population ranging from 251 persons to 400 persons per square km. Besides the industrial towns of Jagadhri, Yamunanagar, Panipat, Sonepat Rohtak, etc., the belt includes one of the best irrigated areas of Harvana. These areas have been receiving irrigation facilities much before Bhakra-Nangal Canal system was laid out. In the far south of Haryana, in the district of Gurgaon the population is higher because of Muslims. Muslim law does not permit the practice of family planning. But it is happy to note that Muslims of this area have now voluntarily decided to give up the ancient and orthodox views in this regard. They have decided to observe family planning devices like all other sects of their coutrymen. This would prove to be of immediate benefit to Muslims themselves provided they are educated properly about the benefits of a small family.

Central Harvana with the exception of Bhiwani and Loharu tehsils showed a moderate density of population. This is that area which received the greatest benefit from Bhakra-Nangal Canals system and other development projects during the decade 1961-71. Western Haryana, i. e., the tehsils of Dabwali, Sirsa, Fatehabad. Bhiwani and Loharu had the lowest density ranging from 100 to 150 persons per square km. The Loharu tehsil had a density of only 98 persons. This belt showed the density lower than the national density. The major cause of such a low density has been dry tropical climate, paucity of water, truancy of rainfall, infertile sand dominated soils, etc.



## People and their Life

The people of Haryana are straight forward, simple, hardworking, enterprising and above all valiant defenders of motherland, "Imbued with the philosophy of Karma, as adumbrated in the Holy Gita and seasoned in the thick of frequent battles and skirmishes, the people of Haryana have developed certain distinguished traits of character, which mark them out from the rest of their countrymen. They constitute a virile race of sturdy fighters and indefatigable cultivators, wielding the sword with as much skill in times of crises as they work the plough in times of peace. In fact, action is the key note of their character; Haryana is the state where action is."1

Jats, Ahirs, Rajputs, Brahmins, Banias, Gujars, Meos and Harijans are the major communities of Haryana. Since time immemorial Ahirs. Jats, Gujars and Rajputs have been dominating this region. They not only dominated the agriculture, the major economic activity in Haryana, since centuries but also excelled in the field of animal husbandry for which Haryana is renowned in the country as a whole. Above all they always remained in the forefront of India's First War of Independace and Freedom Struggle. Even at present they overwhelmingly outweigh all other communities in the armed forces of India. It is because of this reason that some people have been calling Haryana an Ajgar (a word coined with first syllables of these communities) state. In fact they have defended our frontiers like Ajgar and they are self respecting to this an extent that like an Ajgar they cannot tolerate any interference. Powerful, pushing and having a dash of Ajgar they are the real architects of modern developed Haryana.

The Jats are the single largest group of Haryana and it is because of their dominance that major tract of the state is often called as Jattiana or Jatait and the dialect spoken in that part as Jatu Jats are said to be the descendants of Huns and Scythians, virile and brave tribes who entered India in the second century B.C. driven by drought and famine in their homeland Central Asia. The progeny of inter-racial marriage (Central Asiatic soldiers getting married to Indian women) which proved to be more stronger and vigorous than its parents, as is the case with miscegenation of distant communities, came to be known as Jats. In the words of Dr. M. S. Randhawa, a scholar of international fame, "Being a mixed race, the Jats have remained a heterodox people, and have escaped some of the evils of Hinduism such as rigidity of caste

<sup>1 &#</sup>x27;Haryana-Land of Promise & Performance', op. cit., p. 2.

system and food taboos... they also accept women from all castes in marriage and their tribe can be compared to the Ocean in which all the rivers merge and lose their identity. The custom of widowhood is not known among them, as widow remarriage is allowed ... Moreover like Italian emigrant, whatever his interests and wherever he goes, he never forgets the land, and sooner or later returns with his earnings to the village that bred him. In short it may be said that in the whole of India there is no finer raw material than the Jat ... it would be difficult in any country to find a more remarkable combination of cultivator, colonialist, emigrant and soldier." It is a matter of great pride that Haryanvi Jat has been shunning a great social evil for which many reformists (widow remarriage) spent their whole lives and met with little success. True to the Jat traditions of hardwork, dash, drive and love for motherland, it was a Jat Chief Minister who with his dash and undefatigable efforts took Haryana out of acute backwardness, deep poverty, despondence and misery in a short span of time the parallel of which has yet to be witnessed in our country. The Jat Chief Minister not only put an end to the administrative chaos and political instability in the state but took many successful strides in the field of agriculture, road building, electrification, industrialization, education, medical care and above all tourism. He worked miraculous wonders by turning a deficit state into surplus one in a couple of years. Not going into the allegations of highhandedness. repression and dictatorship against him, he executed many plans aimed at Haryana's development. The rate of development then seen in Harvana remains unmatched so far. But when he turned his dash and drive towards dictatorship, authoritarianism and high handedness he had to exit the scene at the supreme will of his own people.

The above cited origin as claimed by many historians is, however, not acceptable to some Jats. A legand prevalent among Jats speaks of their antiquity and it reveals their direct association of Jat Chief's with the heroes of Mahabharata. On the other hand many Jats claim themselves to be the offsprings of Rajputs. "They themselves claim to be of Rajput origin and of the offspring of irregular Rajput marriages (Karewa) and maintain that their Rajput ancestors came from Malwa, Bikaner and Dharangar, which lay to the east, near the ancient Hastinapur. None of the clans has, or at any rate admits having any traditions, of its having come from the north-west. However, inspite of their uniform and persistent statements on the subject, it seems impossible in the light of modern information, to accept their traditions as true."

<sup>2</sup> Verma, D.C., op. cit., p. 50.

Sir George Campbell has similar views about Jats as expressed by Dr. Randhawa. In his opinion Jats have high morale and great physical power. Prodigiously tenancious of their rights in the land they were very orderly and well behaved people, In fact in every way they are beyond doubt a fine people. Jats form a predominant proportion in the districts of Hissar, Bhiwani, Sirsa, Gurgaon, Sonepat, Karnal and Rohtak.

The Rajputs were at time the dominating force in India, Warriors par excellance, dare devil, fierce, energetic, redoubtable, sturdy and robust the Rajputs have always formed the sword arm of India. This warrior race is quite self respecting and they never hesitate to do and die for the defence of their motherland. They are specially attached to their land. Because of this reason Col. Tod is of the opinion that a Raiput can sacrifice his life but cannot part with a single inch of his land. Some people consider the Rajput as aristocrat of the countryside. Even where the Rajputs do not dominate the numbers they command a respectable position.

Rajputs claim themselves to be the descendants of ancient Kshatriyas. According to them they are the descendants of either Ramayana hero Lord Rama or Mahabharata's Lord Krishna. After them they are Surya Vanshi (Sun's dynasty) or Chandra Vanshi (Moon's dynasty) respectively. A sect among them claims to be Agni Vanshi (Fire's dynasty) Rajputs, who were born out of the fire of Agni Yagya performed by the great sage Vashisht at Mount Abu. But most of the historians describe them as a blended race like Jats. In their opinion the intermarriages batween Kshatriyas and incoming warrior clans like Scythians led to the birth of a new but virile and courageous race of Rajputs. Many of the Rajputs were converted to Islam by fanatic Muslim kings like Aurangzeb, Tughlags and Khiljis. The Bhattis of Bhattiana tract are such an example, Mandhars, Chauhans and Minhas are other such examples. Even those who were converted to Islam possess their basic characteristics and form a good fighting force among Muslims.

Raiputs in Haryana are mostly found in the districts of Karnal, Kurukshetra, Ambala, Rohtak and Gurgaon. Though Rajputs in Harvana are less numerous than Jats but command a very respectable position especially in rural Haryana. At one time Rajputs formed a base of feudal society in rural Haryana, but now with the changed times they have lost that base.

The Ahirs constitute a considerable part of the population living in the districts of Mahendragarh, Gurgaon and Jhajjar tehsil of Rohtak district. Because of their dominance in these parts the dilect used here is known as Ahirwati. Some scholars are of the

opinion that word Ahir is the corrupted form of Sanskrit word Abhir which means 'milk man' or of the Mahir (Mahi means curd in Sanskrit), i. e., 'Curd man'. Ahirs who are at present excellent agriculturists were also known as renowned dairy men in past. But Ahirs who call themselves Yadavas claim their origin to Lord Krishna who belonged to Yadu Vansh, i. e. Yadu dynasty. In that case their place of origin is said to be Mathura. Lord Krishna himself used to graze a herd of cows on the banks of Yamuna in Vrindayan. When the Ahirs establish their link with Lord Krishna who himself was a cow-breeder, it gives an air of plausibility to their claim. But some Ahirs and especially those found in the district of Rohtak claim their ancestorship with Rajputs and especially with the Chauhans of Kannauj. They say that they are the posterity from an illegal marriage (Karewa) of a great grandson of Prithvi Raj Chauhan. Widow remarriage which is unheard of among Rajputs is practised by Ahirs like Jats. Ahirs of Haryana are orderly, frugal, laborious and courageous people.

Ahirs are also known for their contribution in India's First war of Independence. Rao Tula Ram and his cousin Rao Kishan Gopal raised the banner of revolt against British in 1857. Rao Birendra Singh a descendant of Rao Tula Ram headed the government in Haryana in very turbulent and instable environment in the year 1967. He was the second Chief Minister of Haryana after Pandit Bhagwat Dyal Sharma who in turn ruled the state barely for thirteen days after 1967 elections. Rewari is the stronghold of

Ahirs in Haryana.

The Gujars are another brave people of Haryana after Rajputs, Jats and Ahirs. Quite robust and sturdy as they appear, it is difficult to differentiate them from other virile races of Harvana. In the past Gujars have been pastoral nomads. In their wanderings they had to pass through many thicks and thins. To protect their cattle herds and mobile belongings they had to be adept in sword and arms. This continued practice on their part made them masters of battle tracts. Gujars are also said to be the immigrants from Cental Asia. In their wanderings they found only the region of present Gujarat quite peaceful and conducive for the furtherance of their pastoral pursuits. Therefrom they migrated to many places in India. According to Cunningham the names of cities like Guiarat, Gujjaranwala and Gujarkhan (all in Pakistan now) have their close association with Gujar tribe. Originally pastoral nomads, Guiars have now started settling as agriculturists in many parts of northern India though they carry on their dairy activities also side by side. In Haryana the Gujars have settled in Khadar area where because of assured irrigation and fertile soil they could hope to

become good cultivators with lesser labour and strain.

The Meos are the inhabitants of Mewat region comprising of the hill country (Aravalis) of Gurgaon (Haryana), Alwar and Bharatpur (Rajasthan) districts. In Haryana the Meos dominate in Ferozepur Jhirka tehsil and western parts of Nuh tehsil in Gurgaon. Like Bhattis they are said to be Rajputs in the past but fell prey to Muslim atrocities and in the times of Qutab-ud-din Aibek they were forcefully converted to Islam. But many scholars refute this origin and assert that Meos are the descendants of some non-Aryan tribe probably Bhils who at one time lived in the then dense forests of Mewat. Col. Tod is of the view that fastnees in the Aravlis is called Mewasso, to which Minhas, Kolis and others make their retreat. According to Tod Minhas once dominated Jaipur and those who were converted to Islam because of one reason or other are called as Meos. "In manners, customs, habits and general attitudes they have much in common with other agricultural tribes of the area, the Jats, the Rajputs and the Ahirs. As a people, they are daring and full of spirit of adventure .... It has been said about the Meos that they are neither Hindus nor Muslims; they are happy blend of the two. They celebrate Holi and many other Hindu festivals. They observe the feasts of both but fasts of none. On the occasion of marriage, birth and other ceremonies, Hindu customs and practices are observed."3 This shows that they cherish their Hindu descent and lead their lives mostly like Hindus. No doubt many of the Meos migrated to Pakistan but they found themselves as misfit in that bigot and orthodox Muslim dominated country and majority of them were forced to come back to their ancestoral land.

The Brahmans, though outnumbered by many other communities have been holding a very prestigious position in Haryana as elsewhere in India. This priestly class enjoyed the top position in the caste hierarchy of our nation. They have dominated the social and religious order of our society for a long time. Claiming their descent from the mouth of Brahma they have woven a divine aura around themselves. In Haryana they have shown such orthodoxy that even in the present changed environment they have shown a negligible degree of flexibility. Brahmans of Haryana and especially those living in villages and even those in urban areas with strong attachment to the countryside continue to stick to old practices. Many of them do not dine with other communities like Rajputs, Jats, Ahirs, etc., nor do they smoke with them. Other communities do not have an easy access to their kitchen. If some person of other caste than their own gets a chance to dine in their home, he has to clean his own utensils also. Not only this even they recognise higher and lower status among different (Gotras) sects of their own caste. For example Gaur Brahmans consider themselves superior to all other Brahmans and do not freely mix with Sarsut Brahmins who are less strict in their caste habits. Tages, i. e., those who gave up their priestly profession to take to agriculture do not enjoy a very prestigious position among so called higher Brahmans of Haryana. What an irony that those who took to active economic activities are looked down upon by the so called high Brahmans who in the course of time had become social parasites.

People in Haryana lead a simple life and inspite of about thirty years of 'self rule' wedded to 'new look' towards life, majority of the people in rural areas cling to age old practices, social and caste taboos as also in superstitions, and age old beliefs. Haryana where the reformist movements like Arya Samaj had a deep impact on the life of people, finds many changes averse to the public health. In this region of milk and ghee where diet overwhelmingly consisted of nutrients in the form of milk-products, people have unexpectedly headed towards non-vegetarian food and liquor. On the other hand the old Biradri Panchayats have been replaced by modern Panchayats. The old Biradri Panchayats exercised a moral authority of villagers whereas the new Panchayats have given birth to village strifes and rivalaries. No doubt after delayed expections the Panchavats have become the medium of spreading some infrastructure needed for the economic uplift of the village masses yet the spontaneous feeling of cooperation among the village folk has vanished. But it is bound to be there. Economic prosperity and affluence have flourished every where in the world at the cost of age-old cherished virtues and values Who does not find even worst consequences of affluence in West ? The so-called most cultured, civilized and advanced race is still continuing the much hated policy of apartheid Lakhs of Asiatic immigrants who have helped in over-powering the 'labour crisis' in England are being dishonoured, hooted, shouted upon and even being massacred by the protagonists of equality and followers of Christ, Examples can be multiplied to show the bad results of economic progress. In that case the position in our countryside is much more comfortable.

### Public Health

A sound mind lives in a sound body, and today not only Haryana but all the forward looking states need sound minds as well as sound bodies. A sound and healthy physique is as necessary

to face the odds and rigours of modern living as an alert and agile mind.

With dilapidated hospital buildings, ill equipped and ill-staffed hospitals, almost non-existent specialists' services, Haryana at the time of its formation had the health services of a rudimentary stage. Per capita allocation on health and medical facilities was only Rs. 4.60 and per capita allocation on health and medicines was barley 21 paise. There were facilities for the treatment of only 5,188 indoor patients all over the state. The Haryana Government minutely studied the recommendations of Mudaliar and Bhore Committee and sat down to draft and impliment a comprehensive health policy. It was decided that 5 per cent of the public savings. if invested in health projects would speedily take the state to its desired goals. As a result of sustained efforts the year 1974-75 saw the consolidation of achievements in the field of health and medical care. By that year the per capita allocation on health-medical facilities as well as medicines had increased to Rs. 10,16 and paise 89 respectively. The number of bads in hospitals and dispensaries had been increased to 7,435 from a number of 5188 in 1966. Dental services have been provided at district and sub divisional hospitals. Sixty-one medical institutions had been provided with x-ray facilities. Tuberculosis clinics were set up at Tohana and Loharu. New Hospital buildings were erected in four towns.

During the last financial year (1976-77) two referral hospitals and five primary health centres were being planned and executed. Medical College, Rohtak has been developed into a first-rate institution along with a 900 bed hospital. So that the benefits of planned progress and development prove more and more fruitful the state has launched a family planning drive on a mass scale. The government is now adopting persuasive methods. Earlier during emergency many excesses are said to have been committed in the field of family planning. The excesses along with many other highhanded activities and authoritarian rule on the instance of Ch. Bansi Lal caused total rout of Congress in Haryana in recent Parliamentary elections.

#### Public Education

A society, a race or a nation which desires to come out of the shackles of backwardness, despondency and poverty has first of all to get enlightenment, A nation is enlightened only through a systematic, scientific and disciplined system of education. Education is the real foundation and defence of a nation. Like defence, education should be the main concern of a welfare state. No progress is possible unless the executioners and beneficeries of a plan or project are properly educated. Those who advocate the inclusion of Education in Central List are the real well-wishers of India, though misunderstood at present. Let us hope that the steps to make Education a concurrent subject would ultimately lead it to become a Central subject sooner or later.

Haryana where the famous scriptures and epics of Hindus were composed, steeped low in the field of education gradually and fell prey to foreign aggressors. The long period of foreign domination reduced the once enlightened people to ignorance. Though after Independence steps were taken to take the torch of learning in all parts of Punjab but the tract which now forms Haryana had not sufficient number of educational institutions. At the time of the birth of new state of Haryana it had only one University at Kurukshetra, which too had been established to pursue research in the vedic and Sanskrit learning. Slowly and gradually some other disciplines were added to its programme but its multi-faceted development initiated only after the birth of Haryana. Once only a teaching University, it became an affiliating University on 1 July 1974 when all the 110 Haryana Colleges were affiliated to this University. With effect from 1976-77 academic session the University has also introduced postal courses at undergraduate level. On the other hand another University has started functioning at Rohtak with effect from 1976. Hissar had a veterinary college but now the town houses a full fledged Agricultural University. This seat of higher learning and research has led to Green as well as White revolution in the State.

On its formation Haryana had 8.21 lakh, 2.81 lakh, 1.07 lakh and 0.36 lakh students in Primary, Middle, High/higher Secondary Schools, and College classes respectively. By now the figures have registered increase at the rate of 30 per cent, 44 per cent, 100 and 160 per cent respectively. The number of schools and colleges has also gone up tremendously. The number of colleges which stood at 47 in May 1968 has touched the figure at 117. The number of high and higher secondary schools has reached 1106 mark whereas it stood at 713 only in May 1968. Out of the 6.731 villages about 5,300 have their own primary schools. In the case of women education the state is taking long strides. The women literacy which stood at 9.2 per cent in 1961 has risen to 14.9 per cent in 1971.

In accordance with the welfare policies of the Sate, education upto middle standard is frees for every body whereas the scheduled caste students get free education in the form of stipends and free ships upto College and University levels. Textbooks and stationery materials are sold to students at controlled rates and free textbooks

are also distributed among the scheduled caste students.

#### Social Welfare

Human society has always been leaping ahead. Every social tradition carries one or the other social evil in it which affects adversely the social order. It is an indeliable process of the social change and reform. Sometimes the process of change is so gradual and slow that it seems to be a stationary society. But a time comes when the rate of social reform assumes such a velocity that it shakes the entire society. This happens only when it succeeds an economic revolution because without economic uplift social uplift is not possible.

Haryana has rightly realised the fact that strength of the chain is best tested by its weakest link. Inspired by the ideal and cherished goal of a welfare state Haryana, has systematically endeavoured to effect improvements in the lot of specially, physically and economically handicapped persons. The department of Social Welfore deals both with the curative and preventive aspects of Public Welfare. Homes for the blinds, After Care homes for astray gone youth, Home for the aged and infirm. Bal Kalyan Centres (Children Welfare Centres), Mahila Kalyan Kendras (Women Welfare Centres). Ortheopedic Centre, Welfare Centres for the wives and dependants of martyrs, etc., are some of the institutions that have made a humble start towards public welfare.

Recently the allotment of house plots to landless harijans, tilling land to landless harijan farmers, etc., are the further steps taken by the Government in the field of social welfare. All said and done, mush remains to be done in this field. The government also aids some of the privately managed institutions aiming at public welfare. No doubt begging has been banned in Haryana, yet beggars can be seen at many places. Steps shall have to be taken to settle them in life and put an end to their bad habit of living on alms only and turning deaf ears to plans aimed at their welfare.

# Travel and Transport

Haryana known as the land of highest cultural significance, holds great fascination for the tourists. The land is strewn with numerous holy places, archeological sights and historical interests. Abounding in ancient monuments the state provides may places of sight seeing and tourist attractions. Tourism, however, is essentially a modern concept. People all over the world have shown curiosity and eagerness to know and see places and people in other parts of the world. On the other hand in the present era of communal strifes, regional parochialism and disintegration tourism is not only the best means of promoting national and emotional integration but also of creating international goodwill and stimulating foreign trade.

At the time of its inception Tourism in the modern sense did not exist at all in Haryana inspite of the fact that this state abounded in places of religious, archeological and historical importance. Though the new state tried its hands at tourism yet much development was not seen for about three years. The completion of Badakhal lake and Suraj Kund complexes in the vicinity of national capital by the end of 1969-70 gave a spurt to tourist industry in Haryana. The state's nearness to Delhi has been a significant fac-

tor in the growth and development of its tourism. The tourists visiting Delhi often love to go out to some suburban tourist complex to enjoy peaceful atmosphere away from the humdrum atmosphere prevailing in the busy metropolis. Keeping this factor in view the tourist development gathered a momentum in 1970-71 and since then it is taking long strides in quick succession. Besides the above cited two complexes, the state has created many tourist attractions in the form of Sultanpur Bird Sanctuary, Hissar Deer Park, Uchana Lake Complex near Karnal, renovated Pinjore complex with a mini Zoo, Sohna Sulphur Springs Complex, Tajewala, Pipli, Hathi Kund, Morni Hills that have been developed in recent past. The tourists are provided with all basic amenities at reasonable cost. Now the authorities have started renovating all the places of religious and historic importance also, so that the tourists by visiting these places besides enjoying sight seeing should also have a peep in the cultural heritage of this great land. The following places in this respect deserve mention here.

#### Kurukshetra

Kurukshetra in ancient times was not a fown but a region lying in between the streams of Saraswati and Drishdwati, in which besides the present town of Kurukshetra the places like Thanesar, Amin, Pehowa, Jind, Safidon, Kaithal, etc., were included. This tract was also called as Brahmvarta or Dharm-Kshetra or Nardak. By Nardak was meant the land without troubles (Nardukh. i.e., without dukh ). The Chinese traveller Heun Tsang has also called it a land of comforts. Relating to Sun, Lord Shiva and Mahabharata 360 pilgrimage spots are located in this region. Watered by Saraswati the region was also called Saraswat. At a distance of 10 km. from the present town of Kurukshetra is located Amin (corrupted form of Abhimanyupur) where Arjuna's son Abhimanyu was killed by Jaydrath. At a distance of five km. is Banganga where before killing Jaydrath Arjuna took rest, Legend goes that he got the Ganga pierced through the earth with the help of his arrow. Bhisham Kund in close vicinity is another spot where Ariuna once again got the Ganga pierced through the surface of the earth with his arrow to quench the thirst of Bhisham Pitamaha then lying on a death bed of pointed arrows. Asthipur a neaby spot is that place where the mortal remains of Mahabharata vartyrs were consigned to flames.

At present the town of Kurukshetra is the district readquarters of the district of the same name. The Kurukshetra University is also located here. A 'Gurukul Vidyavihar' founded by Swami Shradhananda about four decades ago is also here which imparts instruction in accordance with vedic system. Kurukshetra pool, Sanjayahat pool, Sthaneshwar pool are some of the important bat hing tanks here. Kurukshetra is more of a pilgrimage centre than a picnic spot where lakhs of Hindus come for having a bath on every solar eclipse.

#### Kaithal

The town of Kaithal is about 48 km. south-west of Karnal. The town is said to have been founded by Yudhishtra the eldest Pandava of Mahabharata fame and is also associated with the Monkey General Hanuman of Rama the Kamayan hero. Because of its association with Hanuman it was known as Kapisthala or Kavitala in Sanskrit literature. Kaithal appears to be the corrupted form of Kavitala. A temple dedicated to the sacred memory of 'Anjani' mother of Hanuman is built here.

During the Sultanate regime Kaithal was a significant station. Tamerlane or Timur while marching towards Delhi in A.D. 1398 halted here. Probably he saw Brahmans performing Hawan here and thus got an impression that people of this area worshipped fire. In Akbar's times the city was renovated and he got a fortress built here. When Sikhs gained control over Sarhind in A.D. 1764, the Kaithal area came under the control of Bhai Desa Singh in A.D. 1767. The last Sikh occupant Bhai Udai Singh a scholarly figure died issueless on 15 March 1843. Thereafter the British occupied the place and made it a district. But in A.D. 1862 the area was merged in Karnal district. Currently it forms the part of Kurukshetra district. Kaithal contains the tombs of many Muslim saints, the one that of Salah-u-din Bakshi being the oldest and prominent. Two gurudwaras in memory of Guru Tegh Bahadur also decorate this place. A neem tree in one of the Gurdwara is said to he of Guru's time.

#### Thanesar

About 4 km, west of Kurukshetra is situated Thanesar (corrupted form of Sthaneshwar) a famous Hindu pilgrimage centre where the worship of Shiva-linga started first of all. Some people opine that the Shiva temple here is the oldest in our country where Aryan and Dravadian cultures were integrated. Hieun Tsang lived here for many years and Van Bhatt had a meeting with King Harsh Vardhana at this place. Thanesar was the capital of renowned Hindu King Harsha Vardhana. Legend also goes that the ancestor of Kaurav-Pandavas, Kuru meditated here on the banks of

Saraswati, It was here that Parshuram put many Kshatriyas to death with his axe. The place is also said to have been associated with Dadhichi another legendary figure. The old fort, which is now completely ruined, is said to have been got built by King Dalip an ancestor of Kuru.

Mehmood Ghazanvi laid waste this place by way of his loot and plunder in A.D. 1014. The place was resettled by the time of Sikandar Lodhi. In the month of April 1567, Akbar the greatest of Mughal Emperors is said to have visited this place on the occasion of solar eclipse. Mullan Ahmad, a Muslim writer alleges that in Akbar's time the Hindus demolished a mosque standing in the tank and replaced it with a temple. This seems to be far from truth. Thanesar has been a holy place of Hindus much before the arrival of Muslims in India. The tank also belongs to the ancient time. It is possible that the tank in ancient times contained a Hindu temple which might have been replaced by a mosque by Muslims during their hay day. At a later stage Hindus might have wreaked vengeance by replacing it by a temple. Aurangzeb in his times got the temple demolished and got a fortress built there as a strategic point to shoot Hindu pilgrims. It is still known as 'Mughal Island'. The Sikhs occupied this place in 1764 but Britishers occupied it in 1850. Till 1862 Thanesar was a district when it was attached to Karnal district.

According to Vamanpuran the leprosy suffering King Vena got relieved from this ailment after taking a bath in the tank at Thanesar. Many people still believe that a bath in this tank relieves one from many skin deseases.

#### Pehowa

The town of Pehowa is situated 12 km. from Thanesar on the left bank of Saraswati. The ancient name of the town was Prithudaka measing 'pool of Prithu'. The tank here is said to have been got built by Prithu the son of King Vena. Two inscriptions dating to the concluding years of nineth century A.D. reveal that Pehowa once belonged to the domain of Kanauj under King Bhoj and his successor Mahendrapal. One of the inscriptions also points towards the existence of a magnificent Vishnu temple got built by one of the Tomar kings, which might have completely been effaced by Muslims at a later stage. The present shrines seem to have been erected during the last two centuries only. Legend also goes that renowned sage Vishwamitra was decorated with the honour of Brarmhrishi at Pehowa. When Sikhs gained control over this region Pehowa was occupied by Bhai Kainthal, who besides beautifying

this holy place also got built a palace here, which was turned into a rest house at a later stage. Bhai Kainthal died issuless and the Britishers forcefully occupied Pehowa in A.D. 1843. During the days of their power Marathas also got erected shrines dedicated to goddess Saraswati and Prithudakeshwar the god of war. Two gurudwaras in the memory of Guru Nanak and Guru Gobind Singh also add charm to the place.

#### Sirsa

One of the oldest towns of Haryana Sirsa or Sarsa is the district headquarter at present. Some people associate it with the ancient town of Shairishka mentioned in Mahabharata. Others still associate it with the name of ancient king Saras but no such ruler finds mention either in ancient Indian history or legends. Still others are of the opinion that, "Sirsa is named after the Shirish Ban, a large forest once existed here. The place was founded by clearing this forest."

Tamerlane in the year A.D. 1398 occupied Sirsa after devastating the Bhatner fort. From this place he proceeded to Delhi through Samana. In the times of Sher Shah Suri, Sirsa came under the control of Jodhpur house but in eighteenth century the Bhatti Rajputs dominated the scene here. In the year 1774 King Amar Singh of Patiala won Sirsa from Bhattis to be returned to them after 7 years on reaching an agreement with them. In the devastating famine of A.D. 1783 the town was completely destroyed and deserted. Britishers got the town forcefully added to their domain in 1818 after defeating the Bhatti ruler Nawab Zabta Khan. In 1838 a new town to the north-east of the exiting tottering town was settled by Captain Throsby. An old Hindu fort and temple are located here.

#### Hissar

The birth place of Sher Shah Suri the supplanter of Humayun and one of the representative towns of real Haryana, Hissar was founded by Feroze Shah Tughlaq in A.D. 1352. Infact he erected a large fort knowns as Firoze-i-Hissar (the fort of Feroze). The city was developed slowly and gradually in and around this fort and it came to be known as only Hissar. The nearby town of Fatehabad was also founded by the Tughlaq ruler in the name of his son Fateh Khan. After the foundation of this fort the king realised the

scarcity of water here. Hence the ruler got the canals excavated from Yamuna and Ghaggar to fetch water for this place.

Babur, the founder of Mughal rule in India gifted the town of Hissar to his son Humayun. No significant incident took place here in Mughal regime. With the weakening of Mughal empire after the death of Aurangzeb the Sikhs started having skirmishes with the Muslim Bhatti Nazims of Hissar. In 1754, Baba Alla Singh of the Phulikian misal succeeded in ousting Muslim control and himself occupied Hissar, But due to the severe famine of 1783 Sikhs withdrew from Hissar. In the concluding decade of eighteenth century Hissar came under the control of Irish adventurist Geogre Thomas the self styled 'Haryana King'. When Britishers emerged victorious in Britisher-Maratha conflict they came to control the strategic town of Hissar in A.D. 1803.

The minarets of Jama Masjid, Feroze Shah's palace, the summer house outside the fort, Ashoka pillar, Chalis Hafiz tomb and Bholashah's mosque are the historical monuments of Hissar. Madhuban park and Deer park are places of sight seeing here. The Haryana Agricultural University housed in this town has taken many strides for the agricultural and dairy development of Hargana. A mini secretariat has also been added here. Many industrial units are fast developing on the Hansi Road in this town which houses a Cotton Textile Mill also.

### Hansi

Famous for its milk-sweets (especially pere) the town of Hansi played a significant role in the mediaeval history of this region. Many polltical conflicts were born and bred here. One of the earliest engagements between invading Mohammad Gauri and defending Raiput hero Prithvi Raj Chauhan took place near Hansi, Mughals had an important administrative unit at Hansi. The self styled Haryana king, the Irish adventurist George Thomas, after deserting Marathas and Begum Samru of Sardhana carved out a small kindom for himself with its capital at Hansi. He fortified the town of Hansi and also erected many buildings to house his civil and military administration.

## Narnaul

Narnaul seems to be an ancient town but its origin and ancient names are still shrouded in mystry. According to a folk tale Narnaul town belongs to Mahabharata times, then known as Nar-Rashtra. It is narrated in Mahabharat that enroute to Chambal Valley from Hastinapur, the youngest Pandeva Sahdev gained control over this town. According to another tale this town was founded after clearing dense forests abounding with lions. Hence it came to be known as Nahar-naul (the fear of lions) or Nahar-haul (abode of lions) which gradually came to be known as 'Narnaul' with the passage of time. Some people say that while founding this town, with the earth work a nag (serpant) and a neol (mongoose) came out flghting. The builders who were still hunting a name for the founding city at once named it as 'Nagneol which was later on corrupted to 'Narnaul'. Still one more folktale associates the town with king Naunkar of Bikaner who got this town built and named it after the name of his wife Narnaul.

In the beginning the town was controlled by Jogis who performed many miracles. Later on till the advent of Islam, Rathaur Rajputs ruled the town and adjacent area. A Muslim saint Hazrat Turkman came and settled here in the third decade of twelfth century A.D. The Rathaurs had many skirmishes with the companions of Turkman, who himself was killed in A.D. 1137. Turkman is worshipped as a martyr among Muslims. In his memory his tomb in the heart of the town has been visited by thousands of Muslim pilgrims even in the past. From the times of Iltutmish Narnaul came under the control of Muslims. But it has also been a scene of plunder at many times at the hands of neighbouring Muslim jagirdars.

Narnaul is also closely related with the Sur-Afghans. Sher Shah Suri's grandfather Ibrahim Khan came here first. He got the town of Narnaul and surrounding villages from the then administrator of Feroze-i-Hissar to meet the expenses of his forty horsemen. After his death Hassan Khan, father of Shershah Suri, the supplanater of Humayun. become the Jagirdar of Narnaul. After the second battle of Panipat Akbar gifted this Jagir to Shah Quli Khan Mehram who had arrested Hemu, the warrior-general of Rewari who would have defeated Akbar with his valour and strategy but for a chance arrow that struck him in his eye. In 1562 some Muslim Sardars of Narnaul conspired against Akbar, but ultimely leakage of their plan stood in their way.

In Akbar's time Narnaul had developed into a mint. To effect reforms in mint Akbar visited Narnaul along with Todar Mal and Khwaja Shah Mansur. The Jalali Coin was issued by Akbar from Narnaul. Birbal also used to visit this town. Birbals Chhatta stands till this day reminding the visits of Birbal, one of the nine jewals of Great Mughal, Akbar. During the time of Aurangzeb the Satnami sadhus revolted against the supression caused by the Muslim Jagirdar. The revolt took the form of a serious communal

riot. Satnamis after killing the Muslim Faujdar occupied the town. The imperial forces stationed there took to their heels. To quell this riot Aurangzeb himself had to come with a large contingeat.

With the disintegration of Mughal empire after the death of the last Great Mughal, Aurangzeb, a Thakur of Jaipur annexed Narnaul, but soon he lost it to the French General Du-Buaeon, At a later stage Murtza Khan Bharaich got the Jagirdari of Narnaul. In his lineage Nawab Abdur Rehman, Nawab of Jhaijar raised the banner of revolt against the British in 1857. After the sad failure of First War of Indian Independance, he along with some of his co-patriots was hanged. Narnaul, thereafter, was gifted to the Patiala ruler, Maharaja Narinder Singh for rendering loyalist services to the Britishers.

Narnaul is repleate with historical mounments like Ibrahim Khan Suri's tomb, Dargah Turkman, Sarai Mukand Das, Pobianwali mosque, Dargah Sheikh Miran, Takht wali Baoli, Shah Quli Khan's tomb, Hargopal talab, Shah Quli Khan's Jal Mahal, Paltian di masjid, Chhatta Rai Mukand and Chhatta Birbal, During archeological excavations a Jain temple has been found beneath a mosque. It means that during the Mughal period and especially during Aurangzeb's time the Jain temple was buried underground and a mosque built on the resultant surface.

About eight km. west of the town is located the Dhosi hillock. On the top of this hill a saucer shaped plain surface is strewn with the ruins of a hill fortress, probably built by King Naunkarn of Bikaner. A temple dedicated to Chavan Rishi has also been decorating the hill peak. In the memory of Chawan Rishi an annual fair is held here. Born in Bhrigu dynasty Chavan is said to be the founder of 'Bhargava' sect. The Bhargavas of Haryana are also known as Dhosar. The warrior-general Hemu was a Dhosar banian.

## Pinjore

On the Delhi-Simla highway about 20 km. from Chandigarh and about three km. short of Kalka is located Pinjore on the confluence of Kaushalya and Jhajjar, the tributaries of Ghaggar stream. Pinjore is said to be an ancient historic and religious place. It is also said that in ancient times Pinjore was one of the earliest Aryan settlement, which was razed to the ground and buried beneath by the vagaries of time. The ancient stone statues and other stone works excavated here point towards the antiquity of Pinjore. Pinjore is also associated with five Pandava brothers who enroute to Himalaya for their exile, stayed here for some time It was then Panchpur which gradually corrupted to Pinjore.

The earliest mention of Pinjore in history (not legend) is found in Beruni's 'Al-Hind' and Minhaj Siraja's 'Tabqat-e-Nasiri. In the thirteenth century Pinjore formed a part of Sirmur state, the picturesque and charming scenry of Pinjore attracted Iltutmish who snatched it from the Sirmur King and demolished the Hindu shrines and tank. Sultan Nasir-ud-din plundered the riches of Pinjore in A.D. 1254 and was again laid waste by Tamerlane in A.D. 1339 on his way back from Delhi.

In Aurangzeb's time Fidai Khan, the son of Jahangir's wet nurse annexed it from the Sirmur ruler and settled down here. Fond of landscaping and lover of beauty, Fidai Khan started developing a large garden on the pattern of 'Shalimar garden' got designed by Jahangir in Srinagar. In the garden he also got erected some buildings which are charming till this day. The seventeenth century historian Munshi Sujan Rai Bhandari in his book 'Khulasatu-twarikh (A.D. 1696) writes that in Pinjore there existed a large and magnificent 'Bhima Devi Temple'. It seems that towards the end of his regime Aurangzeb got this temple domolished and destroyed. However, at a later stage a small temple under the old name has been built here.

Fidai Khan could not stay for long here. The King of Sirmur through the Raja of Bhowna was trying his best to regain the control over Pinjore, "He (Fidai Khan) requested the Raja to send his harem to the garden for an interview with his wives. The Raja sent such of his female servants as had their throats swollen with goitre. The Khan's wives were terrified on hearing that the climate bred such a disease. Fidai Khan deserted the place." This way Pinjore alongwith 'Mughal garden' passed into the hands of Sirmur ruler but the Sirmur state could not continue its control over Pinjore in the wake of attacks by neighbouring chiefs. Hence Maharaja Amar Singh of Patiala bought Pinjore and adjoining land from Sirmur in A.D. 1775.

At present Pinjore is a part of Haryana. The Haryana government have renamed the garden as 'Yadvindra Gardens' in the memory of late Yadavindra Singh the last ruler of Patiala State and Raj Pramukh of PEPSU. The terraced garden has been renovated and beautified. A children park, a mini zoo and fruit orchard are the added attractions of this spot of picnic and tourist attraction. The small town of Pinjore has also been industrialised. One of the units of Hindustan Machine Tools is working here. The Surajpur Cement Factory is also located near Pinjore.

## Panipat

The birth place of famous Urdu poet Altaf Hussain 'Hali', Panipat is that town of antiquity where in recent history the fate of India was decided by swords and arms. Panipat is said to be one of those five pats (settlements) which were demanded by Five Pandavas from Duryodhan, as a minimum price of maintaining peace, in case the latter was not prepared to give them their due rightful share of Kindom. But Duryodhan declined to part with even an inch of land and his refusal led to the great Mahabharata war. Some historians are of the view that Panipat is about 34 centuries old, Sir Sayyad Ahmad Khan in his work Asar Sanadid writes that this town was founded by King Dandpani in B.C. 707. This is also possible that Panipat of Mahabharata might have degenerated to a mere village with the passage of time and Dandpani rebuilt a town here.

The ruins of archeological importance strewn in the town reveal its antiquity. Some historians are of the view that some king named Arjuna had his castle here with fifteen gates. The old coins and other archeological finds establish the links and commercial association with Persians. On 21 April 1526; 5 November 1556 and 14 January 1761 the fate of India was decided and that of Hindu rulers sealed in three historic battles fought in the battlefield of Panipat. In the first two battles the Mughals who had come from Mongolia succeeded in completly establishing their stronghold. With the third battle Britishers who had come in India for 'trade'and'not territory' emerged 'empire builders' from 'merchants' because Marathas and Afghans (under Durrani), the participants in the war, had failed to gain a hold over India, former by the lack of cohesion and the latter by lack of reseources. This battle decided that now onwards, 'territory and not trade' was their (British) primary concern. The following century witnessed British conquest after conquest, quite contrary to the specific instructions from London to avoid 'schemes of conquest and territorial expansion'.

Ibrahim Lodhi's tomb, Fateh Mubarak Chabutra, Dargah Oulandar, Kavali Bagh-Tank (built by Akbar after his victory) are important historical monuments found in Panipat. At present Panipat is an industrial town which is known for its handlooms. cotton textiles, woollen textiles, silk textiles, sugar mills and light engineering factories.

### Rohtak

One of the ancient towns of India Rohtak has been the capi-

tal of Yaudheyas Kingdom of Bahudhanyak, i. e., land of Plenty. It is said that this town was one of the favourite places of Kartikey the son of Lord Shiva. The heroic traditions of this 'braveland' are said to have been initiated by Kartikey whose old war fort was located in Rohtika, i.e., Old Rohtak. His ride on the peacock is still painted on the houses in this area as a sacred symbol. Probably it was named after Rohita of Rajtrangini, Its original name was Rohitka or Rohtasgarh by which the ruined site of twin cities Khokra-kot is still called. In good old days when the eves of every foreign invader were attracted by Delhi, the town of Rohtak commanded a very strategic significance. Hub of Haryanvi culture Rohtak is the leading town of Haryana. It is about 60 km. west of Delhi. Besides being a district headquarter, town houses, a medical college and newly started Rohtak University. It is also the leading educational centre of Haryana. The renowned leaders and freedom fighters like Ch. Sir Chhotu Ram, Ch. Lal Chand, Pandit Neki Ram Sharma, Lala Shyam Lal and famous folk-dramatist Pandit Lakhmi Das were born and brought up here. They made this town as the centre of their activities also. It is fast developing as a centre of light and medium sized industries.

#### Karnal

Karan' popularly known as Dan Veer Karan'. Kunti's son and Pandavas half brother Karan assumed the command of Duryodhana's army after the death of Bhisham Pitamaha and Dronacharya. Till the end of Sultanate period Karnal did not play any significant role in India's history though Panipat and Kurukshetra nearby towns witnessed many ups and downs in ancient and mediaeval periods. Ibrahim Mirza during his revolt against Akbar plundered the town of Karnal in 1573. Nadir Shah Abdali defeated the Mughal ruler Muhammad Shah here in 1739. Before Marathas captured the town in 1787 the town changed hands between Marathas and Afghans, After capturing this town Marathas handed it over to George Thomas, the self styled Haryana king of Irish origin, who dominated the scene in Haryana for some years. British succeeded in capturing this town in A.D. 1805.

At present Karnal is a district head quarter and the National Dairy Research Institute is also located here. This institute is like a full fledged University given to research in the field of animal husbandary and dairy development. The credit goes to the institute for ushering and pioneering 'White Revolution' in Haryane as well as in the neighbouring state of Punjab. It has been one of the com-

paratively cleaner towns of Haryana. The Haryana Government has added the Chakravarty Tourist Complex in recent years. The Chakravarty lake, adjoining mini lake, rest house, restaurant and mini shopping complex all attract tourists in thousands every year. The greatest benefit to this centre is that it is located halfway between Delhi and Chandigarh on the Notional Highway and tourists going to Simla, Kasauli, Amritsar, Dalhousie, Chamba, Kulu, Manali, Jammu and Srinagar can easily enjoy and refresh themselves for sometime here.

## Gurgaon

According to District Gazetteer the original name of this town was Guru-Gaon which gradually shortened to Gurgaon. The elder Panday, Yudhishter gifted this place to his master Guru Dronacharya for imparting instruction in arms to Pandavas, The tank built and dedicated to this spiritual leader is located on the west of the rail road. Sihi the birth place of the great Hindi poet Surdas is located in Gurgaon district. Because of its close vicinity to Delhi the town has fast developed.

From Gurgaon to Narnaul one finds the hot sulphur springs at Sohna on a range of Aravali hills. The hot waters of these springs are known for their quality of healing skin deceases, It is said that in ancient times gold, i.e., sona was found in these hills, hence the name. Even at present during rainy season the sands carried by streams of rivulets contain insignificant and minute gold particles.

In Gurgaon district Faridabad has developed a major industrial town. Badakhal lake complex near this town has been developed as a tourist resort which attracts native and foreign tourists in large numbers during all seasons. Suraj Kund is another tourist spot near Faridabad.

Sonepat, Mahendragarh, Bahadurgarh, Jhajjar, Hassainguni, Gohana, Asthal Bohar, Sugh, Palwal, Ambala, Bhiwani, Jind, etc., are many other places offering attraction in the form of archeological finds and historical monuments to the tourists and scholars.

Transport

Transport lines are the arteries of development. The development, economic, social and cultural is not possible without ample, cheap, easy and speedy means of transport. In Haryana Railways and Roadways are the means of transport, though bullock carts in many villages, mules in submountaneous parts and camels in sandy areas still dominate the scene.

On the re-organisation of Punjab, the new state of Haryana

got only 1,220 km. of rail-length out of a total length of 3,312 km. Broad gauge as well as narrow gauge tracks are laid in Haryana though 92 per cent of the railway track are Broad guage tracks. Delhi to Amritsar railway line is an important railway line passing through Haryana. Similarly Delhi to Ferozepur route passes through Haryana. Almost all the important towns of Haryana are linked with different parts of India by railway routes. Delhi-Kalka is also a busy rail route especially in summer. Ambala, Kurukshetra, Rewari, Jind, Hissar, Rohtak are some of the important railway junctions of Haryana. Railways is a central subject, the development of which is outside the jurisdiction of the state government.

It is only in the field of road transport that Haryana has taken rapid strides. At the time of partition the then area of Harvana got only 1,895 km. of metalled roads. On 1 November 1966 when the new state of Haryana came into being this road length had increased to 5,100 km, giving an average increase of 170 km, per year, At the same time only 20 per cent of Haryana villages were linked with matalled roads. Within next three years a growth rate of 300 km, of metalled roads per year was achieved and by the end of 1969 Haryana had 6.000 km, of roads. On the other hand 26 per cent of the villages were linked with matalled roads. By March 1975, Haryana had 11,842 km. road length out of which 8,584 km. length was matalled. The road length has now reached near 15 thousand km. mark. This gave the state an average of 30.6 km. of roads per sq. km. against the all India average of 34.5 km. As far as metalled roads are concerned Haryana had 30 km. per 100 sq. km, as against only 14.4 km, national average. On the other hand there was a road length of 134.7 km, per lakh of population as against the national average of 206.2 km. But in case of metalled roads Haryana with an average of 132,1 km, per one lakh of people far exceeded the national average of 86.1 km.

Haryana launched a crash programme of nationalising passenger transport on 1 April 1970 and attained complete nationalization by 30 November 1972. It is worthy of mention that Haryana is the second state in the country to have completely nationalized the passenger transport. Besides constructing new roads, the state has launched a massive programme of strengthening and widening the existing roads.

Haryana Roadways is one of the refficient undertakings of its type in the entire country. At the time of birth of Haryana, its Roadways had a fleet of only 567 buses which increased to 1772 in 1975. The buses now operate a millage of about 3.82 lakh km. daily as against 1.19 lakh in 1967-68 and carry about 4.01 lakh passengers daily as against 1.11 lakh only in 1967-68. On the other

hand the profit of the roadways has decreased from Rs. 73.55 lakh in 1967-68 to 14.30 lakh in 1975. This is because the department has provided many amenities to passengers at no extra cost and extended many benefits to some bus-stands at no profit no loss basis. These are really the steps taken by a welfare state. The Haryana Roadways has also introduced semi deluxe buses on many routes at no extra cost. Night buses on about 21 routes are being plied at present. The Roadways has started an airconditioned service between Chandigarh and Delhi in which movie is also screened. This was first experiment of its type in our country. In the recent measures taken by the Transport Department two deluxe coaches have been put on the road between Chandigarh and Delhi. These buses cover the distance in four and a half hours and halt only at the Chakravarty Tourist Complex, Karnal. The Department also plans to start such coaches from Chandigarh to Dehradun, Jaipur, Agra etc. etc., in near future. These fast moving luxury coaches have come to the rescue of those passengers who otherwise like to travel in First Class Railway Compartments at higher fares, Express services on many routes are plied which save 25 per cent time. Shuttle services are being run to many rural areas. Students and other personnel wishing to avail services daily are accorded concessional travelling passes, For excursions and other parties special buses are provided at no notice. The number of depots has been increased from 4 in 1967-68 to 10 at present, Modern bus stops at some other stations are coming up. In nutshell Harvana has taken such strides in transport that the efforts deserve to be emulated by other states.

# Cultural Heritage

'The perfume of civilization' culture is an invisible fragrance which finds expression in dialects, language, literature, folk music, art, fairs, festivals, festivities, supersititions, beliefs etc. In the words of Mulk Rai Anand, "Actually, there are perhaps as many cultures as there are individuals, because it is the practice by a human being in the private life of expression of his enlightened will that ignites the cultural process." History reveals that Haryana is the earliest abode of Aryans in India. When these semi-pastoral people with their herds and horses wandered down from the Caucasus mountains and entered this north-western part of India, they confronted with Dravadians the earliest settlers of not only this part but the entire sub-continent. The Dravadians were pushed and extricated from this region, but the traces of their culture are not found at all here, probably the Dravadians then leading a primitive life had nothing to bequeath in the form of culture. Aryans slowly and gradually after their settlement here started leading a very advanced life which had a spiritual aspect of highest order. Mahabharata along with Ramayana is the most important contribution to the entire world culture made by the Vedic Aryans, Mahabharta which has remained a very significant part of our cultural heritage for the

last 2,000 years was composed on the sacred land of Harvana, Kurukshetra, A gateway of Delhi, a seat of political power since ancient times, this tract witnessed many ups and downs in the wake of numerous foreign invansions. The Greeks, Huns, Parathians, Persians, Arabs, Afghans, Mongols, Kushans, Shaks, Turks all gave the taste of their might to this part. Some came to plunder the riches while others came to have their sway and hold here. This caused a silent infiltration in the culture of this region, across geographical frontiers. Therefore, the present culture of Harvana which is going under transformation with the passage of time is the synthesis of intermixing that has been taking place over the centuries.

Till some years back under the occidental influence we have been ignoring our Orient Culture, Ignorant about our rich culture the youngmen and women took pride in appreciating and imitating western culture and felt ashamed of their own great culture. It had almost been efaced from urban life. The Republic Day (26th January) is a red letter day for us. We celebrated this day in the initial two years with a great pomp and show, but to our misfortune the common masses could find no place in the performances, since most of the celebrations did not have common roots. The then Prime Minister of India Late Pandit Jawahar Lal Nehru felt after a couple of Republic Day celebrations that the real Republic Day celebrations and rejoicings are possible only when it becomes a source of real happiness for the common masses. It was decided that classical music and dances should be replaced by folk dances. folk music and folklore. Consequent upon this bold decision the first 'Folkdance Festival' on the national scale was celebrated on 27 - 28 January 1953 in the National Stadium, New Delhi. This single attempt altogether changed the people's look towards folk dances. The Folk dances, music and lore suddenly emerged out of the realm of oblivion and assumed a forefront position. Since then the movie makers have given due recognition to folk dances. The 'Republic' means the 'rule of people' and people's common dances, music, songs etc., deserve to be developed to a maximum in such a form of government. Based on our highest traditions we are bent upon making a smiling, singing and dancing republic:

## Folk Dances and Folk Songs

Harvana is essentially an agricultural tract but it excelled in spiritual development and martial traditions too. In this land of saints, sages, martyrs and toiling tillers folk do nees and folk songs befitting all occasions have been composed and continuously practised. Though straight and forward the deep emotions of Haryanvi populace find expressions in their folklore.

Living simultaneously in time and space the folk dances not only provide recreation and amusement to participants and spectators but also physical exercise to participants and thrill to spectators. Some of the important folkdances of Haryana are as follows:

# Phag

'Phagun' (mid-February to mid-March) is the month when agriculturist does not have much to do in his fields. [On the other hand the trees that have already shed their leaves start bearing sprouts, meaning thereby the emergence of new life all round. The Haryanvis start this new life with month long rejoicings consiting of dances and songs. The men and women sing and dance together for hours daily. The resounding environment gives an impression as if Nature itself is welcoming the new life. In this mixed dance, women in their traditional costumes and men in coloured attires present a new look full of vigour and enthusiasm.

The dancers form a circle around a person with a *dholak* or a woman with a 'pitcher'. With the beats of *dholak* or pitcher the dancers start dancing in pairs, leading sometimes to groupings of four. Simple, straight forward and frank people as they are, they exhibit very simple movements while dancing. At occasion clapping is also resorted to. The songs are different but most of the songs invite people to enjoy life to the fullest with a warning note that 'phagun' is short lived, e.g., "Sakhi ri phagun ke din char." Towards the close of the month the phag reaches its climax when men, women children, young and old dance in streets and lanes forgetting their age differences.

#### Loor

In the Bagar parts of Haryana loor is a reference for girls. This dance is entirely performed by girl dancers. In the above cited, tracts the loor troupes are very often found performing this dance though the frequency is now on the decrease. The participants divide themselves in two rows. One row proclaims the birth of a son in a song and asks the other group to give their newly born daughter in marriage to their son. After some promises and counter promises the engagement and consequently the marriage takes place. Keeping in view the martial traditions of the area the boy has joined army and has been called upon to the front,

immediately after his marriage as it happened during two world wars. Since during these wars many soldiers returned after 5-6 years. the period of separation in this dance is assumed as a dozen of vears. The newly wedded girl waits for some days silently but ultimately her patience gives way. She starts talking about her husband in heart catching tones with birds and trees. After explaining her pangs of separation she requests a pigeon (an oft reneated messenger in love tales of northern India) to go to her husband and let him know the woeful tale of his beloved. After sending the pigeon she starts waiting for the pigeon and begging God to send the pigeon back immediately. After sometime the pigeon brings a good news for her; her husband is coming home. This joyful news affords her an opportunity to come out of melancholy and inspires her to jump, dance and sing. With this news her companions come to congratulate her. They now surround her, dance and make her dance to the tune of romantic songs and clappings. This humdrum takes the dance to its climax.

#### Jhoomar

Having resemblance with giddha of Punjab, the jhoomar dance in this state is also known as Haryana giddha. Jhoomar is a 'head ornament' worn by married women and this dance derives its name from that ornament. This is a dance in which exclusively women participate. The dance starts in a circle to the beats of a dholak and thali (rice plate). Dressed in colourful costumes the dancers in no time lose themselves in rythmical abandon. When the participants reach a breath taking stage, they come to a halt of movements. A girl comes forward and breaks into a sone calling her mother and reminding her about the close arrival of 'phagun' the springful and romantic month. Another participant steps forward with a rythmical poise and joins the first in reciting the song. Other participants remain in the periphery and repeat the lines being sung by the two girls to the tune of clappings. Sometimes instead of individual claps two girls face each other and clap each other's hands. Since by the time songs are started the participants feel bit exhausted they give pause before singing a 'new tune. Jhoomar with slight variations is performed all over Haryana.

#### Dhamal dance

This dance (having its roots in Mahabharata) is performed in Ahir dominated areas of Gurgaon, Mahendragarh and Rohtak districts. To the tune of Orchestra constituting of old musical instruments of sarangi, been, dholak, khartals and clappings the song sung during this circular dance depicts of common human feelings. This dance is performed on the moonlit nights separating the cold biting frostful winter and newlife sprouting spring seasons. Gugga was a saint born in Dadreva village of Bikaner. In his memory Gugga dance is performed not only in Haryana but many parts of northern Iudia. Gugga dance is a ritualistic and spiritual dance performed by the males only to appease Gugga the god of snakes.

# Daph dance

A mixed dance daph is performed to the beats of 'daph', a one sided drum. This dance, like Bhangra in Punjab is performed before the harvest starts after spring. The farmer feels happy on the culmination of wheat crop in sheafs of gold and depicts his joy through this dance. Dances are also performed on the happy occasions of Diwali and Holi. Some dances are performed in different parts as devotional celebrations to gods and goddesses as Gangor Puja dance (Gangor means Parvati) in the areas bordering Rajasthan. Another Rajasthani dance popular in areas of Sirsa, Hissar, Bhiwani and Dadri is Ghumar dance. This is entirely women's dance who perform it on their way to the village temple. Khoria dance is yet another dance entirely a performance of fair sex. Similar to Jhoomar in performance, this dance is popular in the core of Haryana.

# Folksongs

Haryana vividly depicts life in its variegated colour with joys and sorrows, ups and downs in melodious tunes and fascinating ways. Like folk songs of all regions this tract too has folk songs befitting every occasion. However, romantic rhymes and ballads are more important. Birth, marriage, separation, changing seasons, harvests, rain, drought, fairs, festivals etc. etc. are commemorated through folksongs. Sisters-in-law (nanad-bhaujai), mother-in-law and daughter-in-law (sas-bahu), brother-in-law and sister-in-law (devar-bhaujai) parental home-and-in-laws home(peehar-sasutal), etc., all find place through rhymes, comic lores and pitiful observations. On the occasion of marriage women sing many comic songs like:

\*Bhari dupehri nahin jaoon re, dola pichhware rakh do'

(I shall not go at mid-day, keep the planquin at the back of house)

The women cut jokes with marriage party when its members are feasting as:

'Ham ne bulaye moochhon wale, yeh muchhkate kyun aye re'

(We invited persons with moustaches, why these whiskless persons have come),

In the month of Sawan (mid-July to mid-August) as in other parts of northern India swings (jhulas) are hung with the branches of trees. Young girls and brides ride the swings and sing songs:

'Jhulan jangi hai ma mhari baag mean re"

(Oh my mother I am going to ride the swing in the garden) Similarly

'Teeja ka teuher ritu saman ki, khari jhoola pa matka chhori bahman ki'

(It is the Teej festival in the month of sawan. Brahman's daughter is playing pranks on the swing).

The girls always hope to get a handsome match. In an area where traditional arranged marriages have been dominant, the friends of the bride break the news about the appearance of the bride groom through folk songs:

'Sakhi tera banna re hai chande ki huniyar'

(Of friend your bridegroom is as handsome as the moon itself)

In this area unmatched marriages though now rapidly decreasing were oft repeated incidences in past. Very often a young tender girl was married to a middle aged man. This broke the heart of girls who gave vent to their feeling through folk songs like:

'Amman meri ki kar solah singar, buddhe ki sejan dhari gayi aye meri man'

(Oh mother after redering me a topclass make-up you have landed me in an old man's life long company).

Like Punjab in rural Haryana songs pertaining to demand for water on the village well by the disguised would be husband from his would be wife are also sung:

"Ik rah pe bateoo jata tha, mone pani pila de hoota"

(A traveller on his journey asked me 'Serve me water oh belle').

This song is parallel to the Punjabi song:

"Sarke, sarke jandiye mutyare neen".

In this land where Lord Krishna sermonised Gita to Arjuna, folk songs pertaining to Krishna have naturally been composed like:

'Aa gaye kirsan murari, gail men Radha pyari'

(Lord Krishana the player on flute has come. Beloved Radhe is with him).

Lord Rama also finds place in many of the Haryanvi folk songs:

'Siya Ram Chale banovas, Lachhman gail men jayi re jade Ram karen bisram, Lachhman rat jagayi re'

(Sita and Rama are going on their exile. Lachhman also goes with them. When Rama takes rest Lachhman wakes throghout the night.)

Folksongs inspiring and challenging the young Haryanvi warriors, to defend their homeland do not lag behind other songs in expressing the feelings desired like:

> Kar desh ki raksa chal, Lal mera saj dhaj ke Ari bairi ne seemayan teri, charon or se aa ke gheri"

(Oh warrior ! go to defend your country in proper uniform. The enemy has surrounded your frontiers).

The folk songs honouring the tricolour have been in vogue keeping the highest traditions of this land of patriots.

'Is jhande ki lalkar, bebe Jai Hind, Jai Hind hoi rahi sai'

(Oh sister, Our national flag is being venerated through the shouts of Jai Hind).

Folk songs of Haryana are so varied in number and theme that a title can be dedicated to these chores, Mostly raga-oriented the Haryana folk songs are rythmic and melodious. The village names like 'Ram Kali', 'Sarangpur', 'Malkauns', 'Jai Jai Vanti', 'Asavari' Bilawal, Dhamsari, Bhairvi, Vrindayam, etc., speak of Harvanyi in built love for music.

#### Folk Theatre

The 'Lok Natya' i.e., folk theatre of Haryana is as rich and varied as it is old. Like other parts of India Rasleela and Ramleela have been staged in Harvana since time immemorial. Besides these two popular themes, many other theme are staged by way of Swangs or sangs (imitations) on the folk stage of Haryana. It is very difficult if not impossible to trace the history of folk theatre in this state. Ali Bakhsh of Rewari is said to be the known earliest pioneer of folk stage in Haryana. With the help of songs and music besides a couple of other themes, he staged the popular mythological lore tale of 'Padmavati'. On this performance Malik Mohammad Jaysi's (a Hindi Sufi poet who also wrote Padmavat) effect dominated, Pandit Dip Chand of Sheri Khanda (Sonepat) who modified and polished Ali Bakhsha's style is often called Shakes. peare or Kalidasa of Haryana. This celebrated stage artist won the title of 'Rai Sahib' because of his martial tunes which he composed. One of his performances Sorath won applause, He also bequeathed trained artists in the person of Swami Hardev, Qutabi Doom and Pandit Bhartu who furthered the tradition set by him.

Pandit Lakhmi Chand of Jatti Kalan (Sonepat) is second only to Pandit Dip Chand in the field of folk theatre. He had a very great benefit over his renowned predecessor. He was also a good singer with a rich and melodious voice. Nal-Damyanti, Meerabai. Savitri-Satyawan, Puranjan-Puranjani, Seth Tara Chand, Puran Bhagat, Shahi Lakkarhara were his noted compositions. PanditNathu Ram, Pandit Sarup Chand, Mai Chand, Manga Ram, Ratti Ram, Sultan, Chand and Pandit Neki Ram are other famous composers of 'Lok Natya' literature. At one time the wave of 'Folk Theatre' gathered such a momentum that Pandit Neki Ram who was deft at spiritual and religious discourses had to shift his line to folk stage. Pandit Sarup Chand's Ban Parva, Cheer Parva, Bairath Parva, Uttampad and Harishchandra gained popularity in this land where people had religious bent of mind.

Haryanvi Swangs are played in the open. These 'open air theatres' are traditionally improvised on wooden planks with no curtains and green rooms. Exit and entrance of participants occur in open and in presence of the spectators. One of the oldest means of recreation, Haryanvi folk theatre is truly 'The stage of people' and has a continuously bright future in the contryside. Mostly the 'folk theatre' consits of male troupes only and the female roles are also played by male artists. But this does not mean that female troups have altogether been unknown in Haryana. Sardari of Kalyat (Jind) and Nathi of Gangaru and Bali of Indri (Karnal) have led some women troupes in Haryana. Of late some renowned artists of stage from some other states have been invited to participate. Shakila Bano Bhopali has graced many such occasions. This intermixing would rapidly lead towards emotional and national integration.

# Language and Literature

Haryana does not have any individual language as Gujarati in Gujrat, Bangla in Bangal, Punjabi in Punjab, Tamil in Tamilnadu or Telugu in Andhra Pradesh though the people living in this tract have a sentimental attachment with Hindi, the mother of dialects used here. Dr. George A. Grierson is of the view that dialects spoken in Haryana fall under the category of Western Hindi. The domain of Western Hindi extends from the Saraswati in the West to Prayag (Allahabad) in the east. Starting from the foot hills of Himalayan mountains its usage continues upto river Narmada in the south. This region gave birth to Brahmanism where from the Hindu civilization took its roots and spread to other parts of India. Among the various dialects spoken all over the area of Western Hindi, Hindustani a mixture of all the dilects is important and easily comprehensible dialect.

In Haryana no doubt Hindustani is now widely used but locally Bangru, Bagri, Ahirwati and Mewati are important dialects. Very often these dialects transgress into the domains of each other. In past when there were no modern means of transportation and communications, these dialects held their monopoly in their areas. But now in the wake of developed and speedy means of communications a new cultural revolution necessitating the intermixing of people very frequently and on large scale, the transgression of dialects is natural corollary. After partition the arrival of a large number of refugees from western Punjab introduced a new element in the dialects in use in Haryana. In urban areas where most of the literate persons lived Hindustani had its sway. In rural areas where even today most of the people can only communicate in their dialects and neighbouring dialects it was impossible to follow the Punjabi language and especially the Pothohari, i. e., Western

Punjabi. For sometimes the 'Crisis of dialogue' in rural areas kept the natives and immigrants apart. But slowly and gradually the new generations among both groups started borrowing words and usages from each others's dialects. The result today is that in refugee dominated rural areas of Harvana the local dialect stands blended. On the other hand the Pothohari as used by refugees also carries impact of local dialects. A very surprising but pleasant thing is also noted. Gffsprings of original refugees communicate in local dialects with natives and in mother tongue with their parents and relatives. On the other hand Haryanvi children have also picked up this practice. In this way slowly and silently the new generations are leading towards emotional integration.

In Jat dominated areas of Haryana mostly Bangru dialect is used. Because of the predominance of Jats in this tract the local dialect is also named as Jatu. In the area with old alluvium known as Bangar as distinct from Khadar, Bangar dialect is used. The entire districts of Rohtak (except Jhajjar), Sonepat, Dadri area of Bhiwani and western part of Rewari tehsil fall in the category. Ahir dominated areas of Gurgaon, Mahendragarh and Jhajjar tehsil of Rohtak district use Ahirwati dialect. In southern Gurgaon where Moes dominate the dialect used is Mewati. In the Bagar tract bordering Rajasthan Bagri dialect is in use. Here and there Shekhawati dialect and Bikaneri dialect are also used in Bagar tract. In the district of Ambala, Hindi and Punjabi in a mixed form is spoken. In Karnal and Kurukshetra districts Bangar and Punjabi get merged together. Narwana which has far long been a part of Sikh state of Jind also uses a blended dialect with a dominating influence of Punjabi. 'Haryanvi' on the whole is mixed dialect spoken and understood over most of the state. Haryanvl is very often called as Deswali in areas of eastern Dadri and Dujana. After this dialect Deswal Jats have derived their caste name.

Ahirwati language has many words of Bagru, Bangri, Shekhawati and Mewati in it. Because of this reason it works as a connecting link between these dialects. The true Haryanvi can be located in Hissar and Bhiwani districts, otherwise also the hub of Harvanvi culture. It is here that Malvi dialect of Punjabi, Bagri dialect of Rajasthani and Deswali dialect of Western Hindi merge into each other and give birth to the dominating dialect of Haryana. A very pleasant aspect of all the dialects used in this state is, that inspite of their differing vocabulary they have almost a similarity in grammar.

On Republic day in the year 1969 Haryana declared to carry out all official business in Hindi. It is a very healthy step and when the official business is done through a language easily understood by the common masses, the distance between the rulers and ruled is bridged and this leads to a rapid development.

With regard to literature there is no separate literature in the Haryanvi language. As already noted Haryanvis are emotionally attached to Hindi and the dialects they speak are the derivatives of Hindi. Hence in the field of literature the Haryanvi men of letters have been producing their literary works in Hindi or its accepted sub-languages.

Surdas, one of the greatest poets of Hindi (Brajbhasha) was born and brought-up in the village Sihi in Gurgaon district. Similarly Pushapdant who is regarded the pioneer Jain poet of Hindi literature hailed from a village near Rohtak, who composed about three volumes in the v.s. 1029. Rup Chand was another poet hailling from Salempur village in Kurukshetra who composed his verses from v.s, 1680 to v.s. 1694. He was a Jain poet and poets like Bachuraj, Anandghan, Muni Hem Vijay, Muni Atma Ram and Deshraj were either his contemporaries in Haryana or his immediate followers.

Kabir is another famous poet of Hindi who in his wanderings is said to have visited many places in Haryana and influenced the life of the people. Under his influenc many Haryanvi poets of that age and notably Gharib Das, Charan Das, Nishchal Das, Veer Bhan and Bhai Santokh Singh came under his influence. Gharib Dass in his writings declares himself as Kabir's disciple. He hailed from a village Chhurani in Rohtak. He is said to have composed about 24 thousand verses out of which only 7 thousand are available at present. Veer Bhan was born in v.s. 1600 in the town of Narnaul where his preachings are remembered by this time. Nishchal Das belonged to a village Koongar in Hissar district and composed three volumes, namely, 'Vichar Sagar', 'Mukti Prakash' and 'Vritti Prabhakar'. His Vichar Sagar was acclaimed as one of the greatest contributions of his time by Swami Vivekananda. Bhai Santokh Singh was greatly influenced by Guru Nanak. His 'Nanak Prakash 'and 'Adhyatma Ramayan' are considered to be the literary works of high order. His verses on philosophy, justice, poetics etc., are greatly admired by the critics of Hindi world.

Many poets and especially Muslim poets were influenced by Malik Mohammad Jaysi a romantic Sufi poet of Hindi. Bu-Ali Qalandar, Jamal-ud-din Hansvi, Mohammad Afzal Kadri, Ghulam Kadri, etc., are such Haryanvi poets.

Vishambhar Nath Sharma 'Kaushik' a renowned Hindi story writer was born at Ambala. Pandit Madhav Prasad Misra an early but reputed Hindi prose writer hailed from Haryana, Babu Mukand Lal Gupta a successful writer of Hindi comedies belonged to

Harvana who shifted from Urdu and Hindi writings under the influence of Pt. Madan Mohan Malviva. He was also a journalist and co-edited Hindusthan Smachar, Hindi Bangwasi and Bharata Mitra.

Besides these Hindi writers there have also been successful Urdu writers produced by Haryana, 'Hali' a great poet of Urdu literature was born at Panipat, Similarly in the field of literature Harvana has the pride of producing one of the greatest work of India, i. e., Mahabharata by saint Ved vyas. The song celestial Shrimad Bhagyad Gita was recited by Lord Krishna in Kurukshetra, Many of the religious books written by ancient Aryans were written in and around Kurukshetra, where the Aryans found their permanent settlement. At present an all round development of literary pursuits is going on in many parts of the State. The name of Shri Uday Bhanu Hans as State poet has already gained fame. Acharya Bhagwan Dev the founder of Gurukul, Jhajjar has been a social servant and scholarly figure who founded also the Harvana Sahitva Parishad, Dr. Vinaymohan Sharma has contributed a lot to Hindi literature by way of his verses and critical essays. Pandit Mauli Chandra Sharma the General Secretary of All India Hindi Sahitya Sammelan, Allahbad hails from Jhajjar. Haryana government honoured this scholar for his distinguished services in the field of journalism and literature, Shri Vishnu Prabhakar a successful story and playwriter led about fifteen years of his literary pursuits at Hissar. Pandit Sthanu Dat Sharma reputed Hindi-Sanskrit scholar was born at Kurukshetra. He deeply studied Sanskrit, Hindi, Bangla, Marathi, Gujarati, Tamil, Telugu and Kannada languages. In his book Haryana ki Bhasha he presented a psychological analysis of the language prevailing in this land. Om Prakash Aditya a comic poet comes frnm Ransika in Gurgaon. Prof. Khushi Ram Vashisht has been a state laureate. He was born at Meham. His first collection of verses Premopahar was published in 1937. Bhim Singh Malik, Shakuntala Srivastava, Tansukh Rai Gupta, Maharai Krishan Jain, Chandra Kant Bali, Raja Ram Shastri, Punayam Chand Manay, Ramakant Dikshit, Balkrishan, Pandit Jagan Nath, Ugra Sen, Rajendra Prasad Jain are other notable literary figures of Haryana who have furthered the different aspects of Hindi literature. Besides Hindi, Punjabi and Urdu are also being developed at a satisfactory speed in Haryana,

# Prospects and Problems

Once a land of great saints and seers, a cradle of Aryana culture and civilarition, an arena of frequent battles and skirmishes and consequently a poor, backward, undeveloped tract, Haryana today has emerged as a forward looking, progressive and a fast developing state. With the concerted efforts of Haryanvis the economy has achieved a sound and stable footing after age-long uncertainity and instability. New grounds have been broken in the field of irrigation, agriculture, dairying, industry, road construction and beautification of landscape. Per capita income is taken as a measuring rod (though it is not foolproof) for measuring the economic progress of a nation, state or a region. At the time of its formation Harvana was preceeded by four states of the Maharashtra, Punjab, Gujarat and Tamil Nadu on 1 November 1966, in matters of per capita income. By the year 1969-70 after about three years of its inception Harvana attained second position in India and it has maintained its place. Its per capita income at 1960-61 prices in 1973-74 was Rs. 433 as against Rs. 340/- for the country as a whole. An agriculture dominated state that had to import about one lakh tonnes of wheat in its year of formation is in a position to export about one million tonnes of wheat in 1975-76. Haryana has done wonders by

supplying water to its dry, sand parched and almost desert areas by way of lift irrigation especially when only one perennial river flows and that too along its eastern boundary. Industrial goods from Haryana are marketed now in country and abroad. About sixty per cent of the agricultural implements produced in India are manufactured in Haryana. Milk and milk products prepared in the milk plants of the state are relished all over northern India, During short span of period Haryana has surprised the entire nation by creating many tourist and picnic spots that provide boarding, lodging and recreation arrangements at reasonable rates in beau tiful and healthy surroundings. In pursuance of the national objectives to bring about socialistic pattern of society the state has intensified and accelerated its multipronged efforts and is poised for a big breakthrough in all walks of life.

Complacency should find no place in Harvana. Inspite of the achievements worth emulation the people and planners should not rest their ores unil every tattered clothed body is provided with reasonably comfortable and cosy clothes, lakhs of malnutrieted babies and expecting mothers are properly fed on protein and vitamin rich foods, thousands of hut dwellers are housed in secure and safe dwellings, countless un-employed persons are given secure and befitting jobs, disguised unemployment is done away with and above all orthodox outlook, obsolete and traditional way of living and thinking is changed, in short every tear is wiped from

every eye.

Enlightenment of people, and especially the overwhelming majority of ruralities need education in its true perspective. Unhygienic conditions, insanitary surroundings, diseases, feuds, factions, village rivalaries and above all unplanned families are the results of ignorance prevailing in our country side. Education not merely in letters but in complete spirit is required. Only when we have really educated people with modern and scientific outlook towards life the real emancipation of people would start. Who doesn't know that untouchability still prevails in our villages? The harijan brethren do not so far, find a respectable place in our social functions like marriages and festivities. Intercaste marriages which are thought as means of promoting emotional integration are looked down upon even by so called well educated and well placed high ups. They are bound to their traditional moorings to such an extent that now it seems as if "the blanket has engulfed them." They can misuse their position, public money, public servants and they can use every fair and foul (more of foul) mean to further their own selfish motives, they can evade just taxes, they can flout the well meaning measures e.g. anti-dowry

regulations, they can hoard and smuggle but they cannot see eye to eye with measures leading to national and emotional integration. For them even intercaste mixing is a Himalayan evil and what they themselves practise contrary to their preachings is sab chalta hai (it all goes). Untill or unless our society is brought out of this mesh no amount of planning would bring social equality and emancipation.

Haryana is an agriculture and village dominated state. She should put an end to all the problems facing its agriculture and ruralities side by side with the nipping of social evils through a well planned enlightenment programme. It was in the news in July 1976 that half of its 6,133 villages face a serious problem of drinking water since the villages are infested with brackish subsoil water. To provide these villages with hygenic drinking water an outlay of Rs. 50 crore is required. No doubt it is a huge sum but it must be accorded top priority and if it is accomplished even at the cost of some other projects it shall be worthwhile. To provide basic necessities of food clothing and shelter to all the citizens of India is the basic requisite of our economic uplift programme'. Our unfortunate brethren living in these villages have already suffered a lot at the cruel hands of nature. Let their age long misery be mitigated by providing them sweet and clean drinking water by a fast moving state competing to attain the prestigeous position of prosperous most state of India. It is happy to note that Haryana would provide drinking water to about 300 villages in a period of one year. This would be a bold step keeping in view the number of villages (844) so far supplied with drinking water. The problem can be solved and rural folk saved from the vagaries of nature, only when the scheme of providing drinking water to villages is implemented on war footing.

Salt-affected soil is a major problem of Haryana and it can impede the agricultural progress of the state. About 84 per cent of the total area of the state has already been brought under the plough and there seems no scope of further expansion in this acreage. But the areas infested with saline and alkaline soils, water logging, soil erosion (both water and wind erosion) can be reclaimed to the benefit of agriculture. Nearly 7.5 per cent of the total 70 lakh hectares salt-affected area in our country is located in the small state of Haryana that constitutes about 1.44 per cent of the national geographical area. Experience in canal irrigated parts of Punjab, Haryana and Uttar Pradesh has shown that intensified canal irrigation especially in shallow water table areas raises the water table significantly and once the water table reaches 2 metres from the surface it diffuses the soluble soils through capillary

action in the soil profie. These salts (sodium chloride, sodium sulphate) make the land infertile and unfit for cultivation. At this front also first of all the ignorant farmers must be taught that only required amount of canal water he employed in their fields, This would also result in the check on 'canal water feuds'. To avoid the problem of water logging along the canal banks, Haryana has already started the lining of canals though the programme was initiated to save absorption losses. The plantation of long rooted trees on the sides of canals can go a long way in this field, besides increasing the area under forests in persuance with our National Forest Policy. But these are the ways and means of checking the further inroad of salanity, and water logging. The large affected tracts in the districts of Karnal, Kurukshetra, Sonepat and tehsils of Jind, Safidon (District Jind), Rohtak (district Rohtak) Hansi, Fatehabad (district Hissar) Ballabhgarh and Palwal (district Gurgaon) and northern parts of Gurgaon tehsil deserve immediate attention of the state through soil scientists. The application of gypsum sand, green manuring, leaching, mollasses, press mud and oil seed coke are recommended as mending measures in such areas.

Torrential and heavy rains through numerous hill torrents heve eroded large tract in the north eastern part of the State. Besides eroding the fertile layer of soil and taking it in mud form along with their flows, the chose (hill torrents) deposit huge quantities of coarse gravel and sand in the piedmont (at the foot of hills) plain and this way render that land too unfit for cultivation. In this area besides building choe bunds contour farming should be practised. Uncontrolled grazing should be strictly banned in this submontaneous tract. This also seems to be almost deforested and needs to be planted with trees and thus would doubly benefit the area. The vegetation shall have a control over water erosion and would increase the forested area of the state.

The southern and south-western parts of Haryana comprising of the districts of Hissar, Sirsa, Bhiwani, Mahendragarh and southern parts of Rohtak and western parts of Gurgaon are affected by wind erosion. Lack of vegetal cover, aridity, over grazing and severe winds combine to aggravate the situation in this area. The thin fertile layer of the soil is blown away and coarse useless sand is deposited at the top surface. The shifting sand dunes accentuate the problem still further. The fertile layer of soil is blown by wind only if it is dry. If the moisture content of the soil is conserved the problem can be tackled. "Measures to ensure the maximum conservation of rainfall and irrigation water as soil moisture available to crops must aim mainly at improving water

infiltration, reducing run-off and increasing the water holding capacity of the soil. Such measures should be given priority in Hissar (now Sirsa also), Bhiwani, Mahendargarh and Gurgaon districts, a belt having low fickle seasonal rainfall." Now with increasing irrigation facilities no lands be left as current fallows. New farm technology should be employed to get more than one crop from the fields as the unsown lands are much prone to wind erosion. The 'Green Belt' would no doubt mitigate the problem to a considerable extent but the planting of trees on the boundaries of fields by individual farmers and check over excessive grazing would almost uproot the menace.

As already stated only 3.4 per cent area of the state is under forests whereas 20 per cent of its plain tract and 60 per cent of hilly area should be under forests. All steps should be taken to plant trees along the roads, railway tracts, canals, steep slopes (check water erosion also), and field boundaries (in wind erosion affected areas). Quick maturing varieties should be given proference over other species. The expansion of forests would supply fuel, timber, raw material to industries, beauty to landscape, and would also make the climate salubrious as would also check erosion.

In a state where because of the lack of perennial streams no multipurpose projects like DVC or Bhakra can be started, power is bound to be a problem. No doubt thermal power plants are being erected and added but the State of Haryana deserves to have an atomic power plant, more than any of its neighbouring states. Its expanding industrial units, increasing use of new farm technology and overall economic progress of the state require power at ever increasing doses. Probably no amount of generosity on the part of neighbouring states can match the convenience that would be created by State's own atomic power station. No doubt Haryana was the first Indian state to take electric current to every village, but its effort would bear ample and desired fruit only when each hutment glows with the electric light. Many poor people have not been in a position to undertake the expenditure of taking the current within their four walls. For this purpose state shall have to subsidise the concerned expenditure. Once every house is connected with the state grid the demand of current would multiply manyfold. The enormous demand cannot be met with the power got from other states which are at liberty to effect cut in times of power crisis. If on the other hand every hutment is not provided connection on the plea that state doesn't have sufficient power resources then the purpose of rural electrification would be half achieved

only. In northern India Haryana has a strong and just claim to have an atomic power station.

Fish is a protein rich food and many economists all over the world advocate fish as an ample and alternate food to meet the challenge of food problem, consequent upon increasing world population. Many nations like Japan, China, Norway, Sweden. Canada, the U.S.A. Britain, Peru etc. today derive a good deal of their food requirements from fish. As compared to only 29 per cent area covered by land surface on our planet 71 per cent area is covered by water bodies. All the oceans, seas, bays, gulfs, streams, lakes and all other waterbodies can provide much more and rich food in the form of fish than the soil. It is high time that wide publicity and training is imparted in the basic knowledge of fish culture to the inhabitants of this state also to bring about a change in their mode of thinking. There are about 1203 ponds having about 32 acres about (12.5 hectares) of culturable water area available in the state. Only about one-fourth of this area has been brought under effective fish culture. Many of these water reservoirs need such improvements like re-enforcement of embankments. building of inlets and outlets, cattle ramp etc., befor these are made fit for fish culture. Population of fishing community is very small in Haryana. Only about 8000 people (about 0008 per cent of the total population of state) are gainfully employed in fishing. In the year 1974-75 Harvana produced about 1.2 lakh metric tonnes of fish out of which 80 per cent was exported to Delhi, Calcutta and other markets in want of a domestic market.

Last but not the least agriculture on which so far hings the economy of the state needs to be still further improved. It is not possible to increase the area under cultivation since second highest percentage (cultivated area : total geographical area) of cultivated area (Punjab 86 per cent, Haryana 84 per cent) is already found in Haryana. To bring the limited wasteland under plough would be a costly affair. By intensifying the optimum use of irrigation facilities. extending lift irrigation to bagar tracts, raising more than one crop (multicrops), raising high-yielding varieties of superior grains and cash crops, using chemical fertilizers efficiently and in an optimum way, using insecticides at proper times, developing subsidiary occupations like dairying, piggery, poultry fishing, and by developing agro-based industries many agriculturally advanced countries can be left behind by Haryana. Through its extension services the government must impart to farmers that they should practise 'dynamic agriculture' instead of 'static agriculture' With changing socio-economic, techno-managerial and price conditions farmer must change his cropping patterns. While a dent has been

created on the problem of rampant poverty, the state has vet to go a long way. The success achieved during one decade lends colour to the hope that given right leadership Haryana will one day become the richest and most prosperous State in India. Its fine record of fruitful performance promises a bright future for its citizens who faced ordeal and arduous challenges of natu e and man for about one thousand year. After the revocation of internal emergency many instances of injustice, repression, highhandedness and authoritarian rule have been brought to light. These atrocities committed on the toiling labourers, tillers of the soil and adventerous entrepreneures must have told upon their proficiency and efficiency. The continuance of such misdeeds could have led to reduced production at all fronts and misery for the common man. It is heartening to note that the Central as well as State Government have started looking into all such cases with a clear intention of punishing those found guilty. The farmers, labourers, industrialiasts and alike in the hope of getting full justice should once again gird up their loins and march with new vigour and enthusiasm on the way leading to more progress and affluent prosperity, so that the enviable position of 'the prosperous state of Indian Union is achieved' in letter and spirit.

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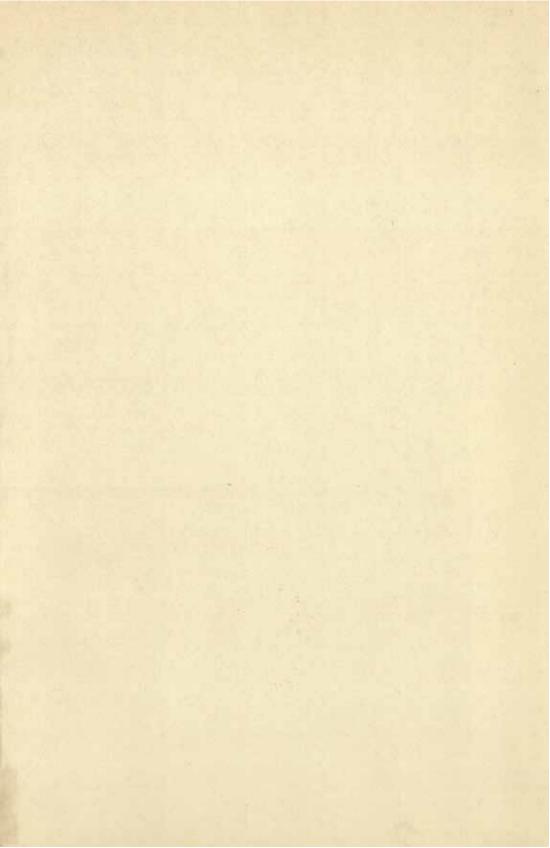
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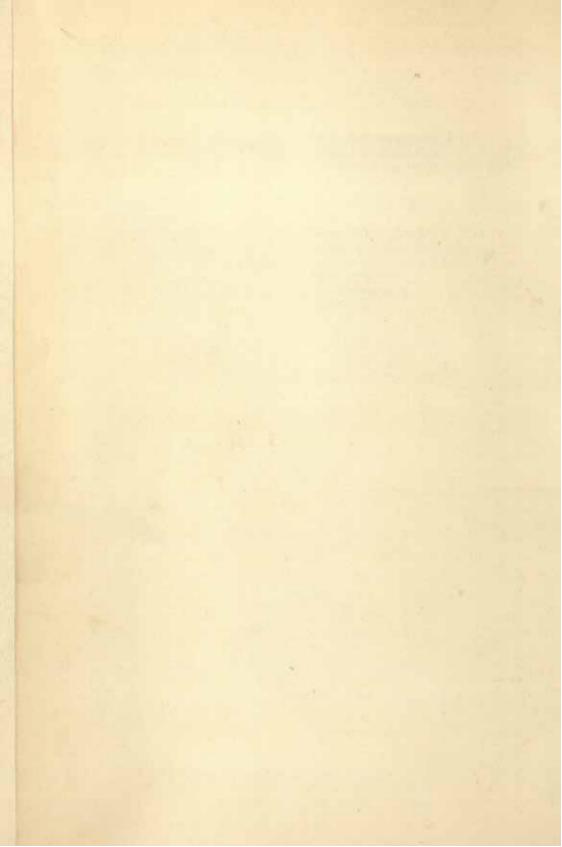
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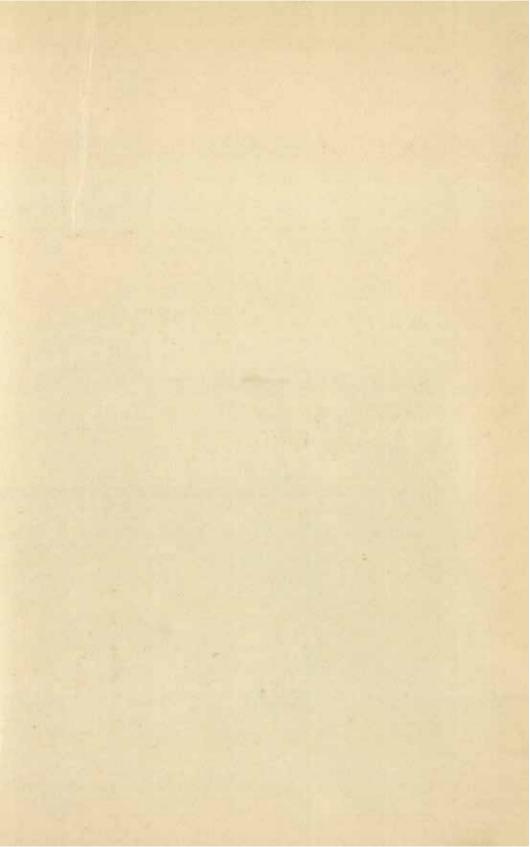
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